FEBRUARY 1960 2s. 3d.

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Personnel Management and Methods

BOLD TRAINING SCHEME FOR THE UNSKILLED 21

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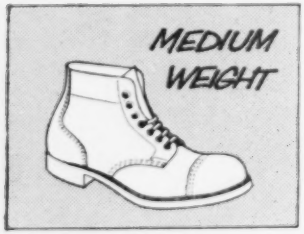

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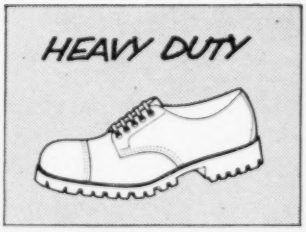

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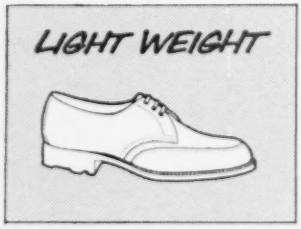

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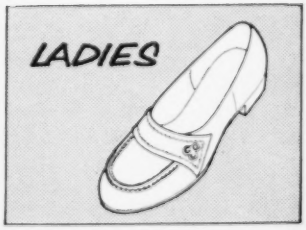

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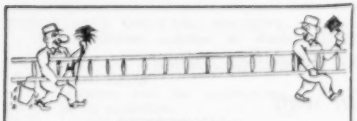

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INSIDE BACK COVER **CLASSIFIED GUIDE TO SERVICES & EQUIPMENT**

Vol. 26. No. 236. Printed for the Proprietors, Shaw Publishing Co. Ltd., *registered office: 180 Fleet Street, London, E.C.4, England (Waterloo 3588),* **by Samuel Temple & Co. Ltd., Vencourt Place, King Street, London, W.6.**

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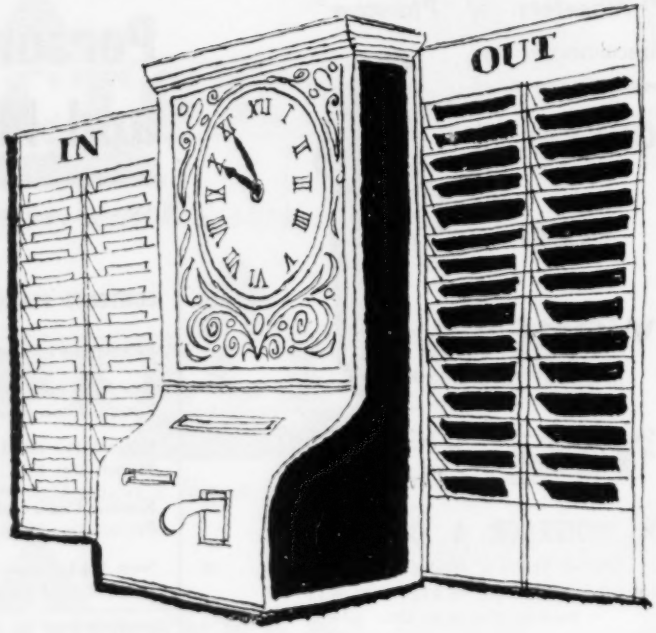

When winter comes the Common Cold, and a host of other minor ailments, will not be far behind. They play havoc with staff attendance, and are a primary cause of lost man-power reduced productive efficiency and lower profits.

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MANAGEMENT DIARY FOR MARCH

BRITISH INSTITUTE OF MANAGEMENT

1 **London.** Communication: seminar on the individual's ability to express himself, and the manner and method of presenting information within the company
3-4 **Newcastle.** Preventive maintenance of machinery
7 **London.** Controlling the sales force: how far and by what methods a sales manager can control salemen's work
9 **Birmingham.** Production control in the smaller firm: introduction to the theory and practice
16 **Cardiff.** Management ratios: use of new techniques of planning and control
21-26 **Newcastle.** Case-study leaders' course.

BURTON MANOR (Wirral, Cheshire)

28-Apr. 8 Supervisory management for established foremen and supervisors.

COLLEGE OF PRODUCTION TECHNOLOGY (Ashford, Kent)

Residential Courses

7-11 Human relations: for personnel, education and training officers; to give them a better understanding of the subject in industry and commerce
7-25 Executive development: consideration and discussion of subjects such as human relations, work study, budgetary control, cost accounting and internal audit. Suitable for senior management of small firms and for middle management in larger companies
14-18 Work study: appreciation of its application for middle and senior management
21-25 Budgetary control, cost accounting and internal audit: full appreciation for senior management and for executive directors concerned with administration and production
28-Apr. 1 Foremanship: emphasis on discussion, experiment, and the practical handling of human and work-study problems.

INDUSTRIAL WELFARE SOCIETY

Non-residential courses at Robert Hyde House

1-3 Basics of personnel administration
8-10 Interviewing
In industry and the community
14-16 Sales executives
21-22 'Good housekeeping'
Visual aids
22-24 Office executives
28-Apr. 1 Foremen
29-31 Personnel records: current practices and methods.

Residential conferences outside London

7-11 **Lilleshall Hall.** Manual lifting and handling: course for instructors
18-20 **Scarborough.** Foremen and forewomen

Day meetings outside London

2 **Manchester.** Catering
9 **Birmingham.** Training
23 **Edinburgh.** Industrial health
30 **Birmingham.** Office supervisors.

INSTITUTE OF INDUSTRIAL SUPERVISORS

Week-end residential courses

4-6 **Leamington Spa.** Profits, prices and productivity
4-6 **Bournemouth.** Weighing up people and jobs: practical exercises designed to help supervisors to be more effective in matching people to jobs, and jobs to the available talent
4-6 **Buxton.** Incentives, merit-rating and job evaluation
4-6 **Droitwich.** Practice of supervisory management: exchange of experiences and ideas about the task of being responsible for other people's work
18-20 **Scarborough.** Human relations: giving special consideration to the problems in human relationships which every foreman must be able to solve
18-20 **Buxton.** Cost reduction: leads to an understanding of how shop expenditures are classified and controlled
25-27 **Buxton.** Work study: introduction to techniques, illustrated with films and exercises in job analysis and effort rating.

INSTITUTE OF PERSONNEL MANAGEMENT

Branch Meetings

16 **Sheffield.** Personnel Management Oversea: talk by Mr. Leslie Stephens, Director of the Institute. Danum Hotel, Doncaster. 7.30 p.m.
16 **North London.** Thoughts on Industry: a panel asks for opinions and gives its own—a trade union official; Miss Nancy Seear, lecturer at the London School of Economics; and Mr. John Ayres, managing director, Simms Motor Units Ltd. Eastern Gas Board Demonstration Theatre, Enfield. 7.30 p.m.
16 **London—Central London Group.** Automation: talk by Dr. E. A. F. W. Crossman, Reading University. Royal Commonwealth Society, Northumberland Avenue, W.C.2. 1 p.m.
17 **East Midlands.** A Trade Unionist looks at the Manufacturing and Retail trades: talk by Mr. T. Cynog-Jones, research officer, Union of Shop, Distributive and Allied Workers. Overseas Club, Nottingham. 7.30 p.m.
17 **Cardiff and Newport.** Redundancy Procedures: a discussion meeting. Park Hotel, Cardiff. 7 p.m.
30 **London—Slough Group.** The Supervisor's Attitude to the Personnel Officer: joint meeting with the Institute of Industrial Supervisors. Royal Station Hotel, Slough. 7.30 p.m.

LOUGHBOROUGH COLLEGE OF TECHNOLOGY (Department of Industrial Engineering)

14-25 Advanced techniques of work simplification: includes information on ergonomics, production costing, machine utilization, cybernetics, and the vital need to improve communications if attitudes are to be changed
28-Apr. 1 Special short course on production planning and control.

NATIONAL INSTITUTE OF INDUSTRIAL PSYCHOLOGY

14-25 Intelligence testing: theory underlying test construction, the use of test results and their interpretation, instruction in the giving and marking of four intelligence tests
28-31 Tests for the selection of engineering apprentices: primarily intended to ensure a succession of trained testers in companies in which a N.I.I.P. engineering apprentice test battery has been installed.

OTMA MANAGEMENT TRAINING CONSULTANTS

London Courses

2-4 Running a meeting: factors that govern whether the meeting is necessary; planning and guiding the proceedings; summing up; and practical exercises
2 Successful speaking: working group for managers who wish to attain competence as speakers in a short time
3 Sales-letter writing: producing letters that get the right answers—letters with good public relations value
30-Apr. 1 Letter and report writing for managers and supervisors.

Meeting outside London

14-16 **Glasgow.** Letter and report writing.

OFFICE MANAGEMENT ASSOCIATION

30 **London Branch.** The Big Business of Words: the multi-facet subject of receiving, recording and handling correspondence and communications between departments, companies and countries.

SUNDRIDGE PARK MANAGEMENT CENTRE (Bromley, Kent)

13-Apr. 1 Measurements for management: review of a wide range of problems facing general management—including work study, operational research, statistical methods, the economic use of capital, and personnel.

UNIVERSITY OF BIRMINGHAM (Institute for Engineering Production)

7-18 Designing for production
21-Apr. 1. Design for industrial experiments.

URCHFONT MANOR (Devizes, Wilts.)

8-9 Modern executive selection: exposition of methods used by the Dowty Group of Companies, followed by criticism and discussion
21-26 Thinking, speaking and writing.

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NEWS NAMES NOTES

A RECENT SURVEY by the Office Management Association, which covered over 70 computers in commercial use, revealed that in no case had redundancy been caused—in one case, the introduction of a computer had created 100 jobs, of which 75 were capable of being done by existing employees. The conclusion is that the two years' preparation needed for the installation of a computer can be well used for planning and executing staff reorganization.

NO PERSONNEL DEPARTMENT is fully equipped without a merit-rating scheme. And this is becoming true of staff-grading. This is the opinion of Mr. A. G. P. Elliott, chief of personnel and training, Simon-Carves Ltd. Addressing a day-conference on staff-grading, organized by the British Institute of Management, Mr. Elliott warned that, although these schemes are clearly fashionable, keeping-up with the Joneses is a poor reason for introducing any technique of management.

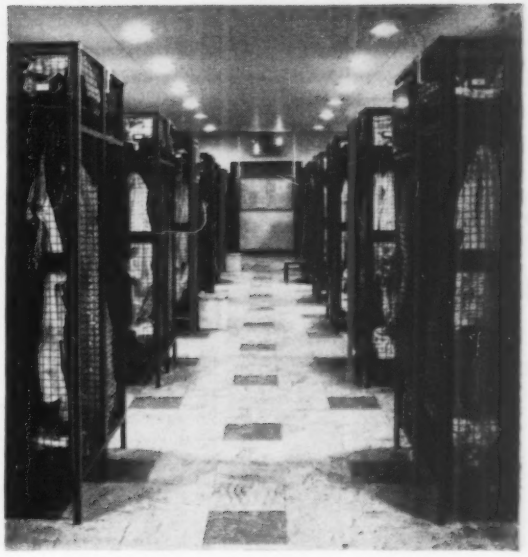
SHOP WORK must be made more attractive to youngsters, says an editorial comment in *New Dawn*, official journal of the Union of Shop, Distributive and Allied Workers. It continues: "Evidence is needed that retail distribution offers a future for the ambitious. Otherwise, the school-leaving kids will opt to sweep floors and make tea in factories."

THE PRODUCTION ENGINEER, more than any other engineer, more than any scientist or any accountant, is concerned with the day-to-day management of men. Mr. G. R. Pryor, president of the Institution of Production Engineers, made this claim in his address to members at their Annual Dinner for 1959. He added that members should also remember that, unless they were prepared to train more school-leavers than they required at the moment, "the generation born in the moment of victory will inevitably become unskilled and consequently liable to future unemployment."

MR. T. W. GREAVES, safety officer at Fort Dunlop since 1949 and founder member of the Birmingham Industrial Safety Group, has retired after 40 years' service with the Company. Over the ten years that Mr. Greaves has been with Dunlop, the number of lost-time accidents has been reduced from 219 to 82 per year.

A PACKED AUDIENCE of members of the North London Branch of the Institute of Personnel Management and of the North London Section, BIM, attended a talk last month by Mr. R. R. Hopkins, personnel and welfare manager of Vauxhall Motors Ltd. Mr. Hopkins outlined his company's experiences on changing their incentive scheme over to a system of flat-time payments, supported by several tangible and non-tangible benefits. On the subject of service recognition awards (gold watches for 25 years'

'HARCO' at ILFORD



To safeguard the high quality of their photographic products, Ilford Limited take every precaution to exclude dust from manufacturing departments. Employees change into nylon overalls, leaving their outer garments in

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NEWS
NAMES
NOTES

service, for example), he commented that this usually resolved itself into " bolting the stable door after the horse has decided to stay in ".

A DELEGATION OF EXPERTS from Italy recently visited this country to investigate management-worker problems. To acquire some experience of industrial relationships at work in Britain, they spent part of their five-

day stay at the Finchley works of Simms Motor Units Ltd. Mr. John Ayres (left, front), managing director of Simms, joined the delegation in full discussion on aspects of personnel management in Britain and in Italy. Others who gave the visitors their assistance were Mr. H. R. Daddow (right, front), works director, and Mr. L. Hawkins, chief personnel executive, who stands behind Mr. Ayres in our photograph.

MR. J. F. DEAN has been appointed Industrial Relations Officer for the South Western Electricity Board. On release from the R.A.F. at the end of the last war, he held the post of deputy training officer in Birmingham. Shortly after nationalization, Mr. Dean was transferred to the Midlands Division, becoming education training and welfare officer. In 1950, he was made divisional establishments officer until he moved to the South West and, until recently, he was secretary of the South Western and South Wales Division Joint Advisory Council.

THREE NEW PROJECTS proposed to the International Labour Organization by the Managing Director of the United Nations Special Fund are: a three-year project for an industrial instructors' training institute in India; a three-year project for a national centre for training supervisory personnel in Polish industry; and a four-year project for training of vocational instructors in Yugoslavia. The total cost of these proposals should amount to approximately £913,000.

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PERSONNEL MANAGEMENT IN PRACTICE

WE may see a revival of flag-flying in this country if the example of **The Imperial Smelting Corporation Ltd.,** is followed. At this firm's **Widnes factory,** they recognize that a good accident record can only be achieved by a combined effort, so they are going to fly a 'no-accident' flag to encourage the interest of each employee. It will fly proudly over the works as long as the factory is free from lost-time accidents.

If an accident occurs, the flag will be lowered; and it will remain in that position until seven consecutive days have passed without an accident—and then it will be hoisted once more. At the base of the flagpole, there will stand a display board showing the number of consecutive days on which the flag has been flying. On entering the works, everyone will be reminded of the 'safety situation', and what is required on the job to maintain standards.

But this firm does not scorn the more conventional means of reducing accident figures. A group accident prevention scheme is beginning this month. The Avonmouth, Swansea and Widnes works will be competing with the Bloxwich, Burry Port, Seaton Carew and Newport works — the first time these factories have had an opportunity to vie together in a common field. There will be a trophy for the winners.

★

FOR four years in succession, an 'introduction to industry' course for selected sixth-form schoolboys has been organized by **EMI Electronics** of Wells, Somerset. This scheme is now firmly established and its details are of general interest.

The programme is arranged over a period of one week during the school summer holidays to help the students to select the most beneficial course of study when going up to the University —or a technical college—if they have already decided to make their careers in electronics. The number taking the course is limited to six to enable the maximum of personal attention to be given to each individual.

The instruction consists of a study of the structure and organization of the Group and its associated Companies, its history and products and the development of projects from conception to finished product. Tours are made of all main departments and the brief course concludes with a lecture by **Mr. A. J. Robb,** the Company's **Education Training Officer,** on opportunities and facilities for training in E.M.I.

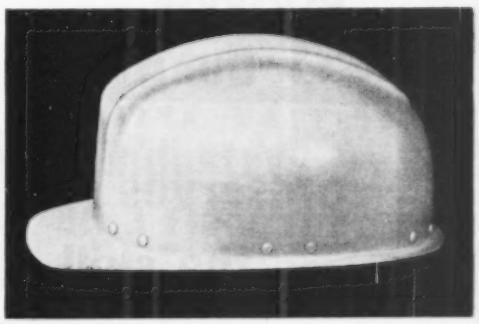
★

AT Christmas, old people and children in need who live near **Wishaw,** the Scottish factory of **S. Smith & Sons (England) Ltd.,** received £800 which had been collected in the works. This is typical of the charitable systems common to the works of this public-spirited firm.

The gear-cutting section, at Wishaw, entertained 30 children in the factory canteen. Other departments gave a party to 15 children of Dr. Barnardo's Home, Peebles. Youngsters from another 'home' wrote letters to Santa Claus, which were forwarded to Wishaw employees and, if possible, the wishes were granted. One section gave small sums of money to old-age pensioners, another visited 300 mentally handicapped children with gifts of a television set and sports equipment.

At the **Putney** works, presents were collected for children's homes in the district; and at **Cheltenham,** Smith employees have an impressive list of charitable hospitals, old folks' homes and children's homes which were helped this Christmas. There has

For Strength Comfort Lightness



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Industrial and Safety Officers and all concerned with the purchase of protective headwear are invited to write for full details to :

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'Celastoid' acetate sheet is extremely tough—at the same time brilliantly clear. It will not shatter, crack or splinter. It gives a real and substantial measure of safety—and perfect vision. 'Celastoid' is basic equipment for the morale and efficiency of your workers, an essential first step in your safety planning.

protects the man

preserves the skill

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ACETATE SHEET

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Celanese House, Hanover Square, London W.1. Telephone: MAYfair 8000

PERSONNEL MANAGEMENT IN PRACTICE

been a wonderful response from the Cheltenham workers who are connected in this way with about 30 different organizations. Some of the factory people extend this charity throughout the year, with coach trips and picnics for pensioners and children.

The **Cricklewood** factories too send Christmas trees to orphanages, in addition to gifts for old people living alone or in Salvation Army hostels. Thousands of men and women in these factories contributed sixpence or a shilling each week throughout the year to add something to Christmas for those in need. It is hardly necessary to point out that, in such an arrangement, everyone gains immeasurably—the poor, employees and indirectly, the Company.

★

THIRTY - TWO employees of **Turners Asbestos Cement Co. Ltd.,** were presented with long-service Certificates at Trafford Park recently. Seven employees were presented with Certificates for their 40 years' service, each having received cheques for £250, and 25 employees were presented with Certificates for their 25 years, each having already received cheques for £100.

The presentations were made by **Mr. K. Neve,** executive director, who was assisted by Mr. J. P. McCormick, works director. The recipients, with their guests, were entertained to cocktails and a dinner given by the T.A.C. directors. Later, this was followed by a cabaret and dancing attended by the other holders of the Company's long-service Certificates and their guests.

The traditional gold-watch seems a small token compared with the munificence of this company.

★

PROGRESSIVE training methods have always been a feature of the administration of **Joseph Crosfield & Sons Ltd.,** soap and chemical manufacturers of **Warrington.** However, the Company has been observing, in its new plants, the results of rapid advances in technical knowledge, so that they have found it necessary to begin a new scheme of 'process learnerships', **i.e.** a planned period of training for all boys entering the factory.

To meet the demands placed upon them by technical development and in order that the boys might gain from the accumulated experience of Crosfield employees, this scheme was devised to enable operators to hand on their specialized knowledge in a systematic way. This personal tuition will help Crosfield methods (that have been proved over the years) to be continued and, most important, the boys' time will be spent in doing a job of work.

So that he can negotiate the difficult change from school to industry, in an entrant's first year he will be given a useful job to do which will also help him to benefit from the main part of his training. During this gradual process, he will be receiving an introduction to the work of the Company through courses in the Company's Training Centre.

At the age of sixteen, he will be transferred to the Quality Control Department for his next year. This will introduce him to all the production units in the factory and give him a detailed knowledge of the plant layout, raw materials and the finished product. The next two years are spent in two production departments for a thorough training in the operation of chemical plant.

After the four years, the young man is ready for appointment to a permanent job in a factory department and, if he shows ability, he can gain promotion to more responsible process jobs.

When this scheme was first considered, the Company sought the advice of the Principal of the local Technical College, who recommended that a course should be started for the City and Guilds Certificate in Chemical Plant Operation. Like their trade apprentices, these students attend their course on a day-release basis. In future, all school-leavers joining the Company with a view to entering factory departments will pass through this training. To be quite fair to boys already employed, this Warrington firm has arranged for twelve of these boys to begin their training course.

★

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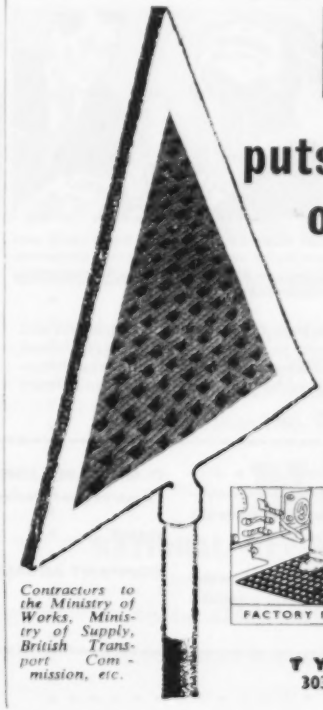

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PERSONNEL MANAGEMENT IN PRACTICE

employee who arrives more than 20 minutes late will not be allowed to start work until the afternoon or, in some cases, the following morning. Although it was unpopular at first, the decision has paid dividends already and, in the week after the announcement of the ruling, all workers reported for work within the specified limit. The majority were on time and only a few workers arrived late — though even the latecomers were well within the 20 minutes' grace.

Staggered arrivals had been dislocating the work in this factory for some time — teams had been compelled to wait for a late man to appear before starting — so that the lost working time was substantial. Viewed in this light, the strict policy of making employees respect working periods is not tough: it was not easy to enforce, but it is quite reasonable.

★

A WEEK-END for two in the luxurious surroundings of the Savoy Hotel in London, with a chauffeur-driven car at their disposal, was the prize for the two winners in a competition run by **Smith & Nephew Ltd.**, for their company representatives.

The competition was for the highest number of personally booked orders for Nivea products taken during a bonus-offer period: it was divided into two sections. **Mr. Michael Hooper** (London) was the winner of section one, for representatives whose territory consists of city areas; and **Mr. Alec Lewis** (Isle of Wight and Hants) was the winner in section two, for representatives covering major towns, villages and coastal resorts.

★

SINCE apprentices from those factories which lack a training centre of their own are likely to become the responsibility of the local technical college, there is a lot to be said for the way in which **Broom & Wade Ltd.**, air compressor and pneumatic tool manufacturers of **High Wycombe**, approach the task of selecting apprentices.

In the first instance, applicants are interviewed by the personnel manager, **Mr. R. V. Bishop** and, secondly, by various departmental heads. But, before any final decision is taken, the principal of the local technical college is asked to visit Broom & Wade's factory to offer his views on the individual boys and to contribute directly to selecting those who will benefit themselves, and contribute most to the firm, as a result of the instruction they will receive at the college.

This three-part method might equally increase reliability in the selection processes in other firms—even in those who have their own training centre and staff. Its value would surely be felt where apprentices are sent on day-release or evening courses.

★

A RATHER uncommon expression of a family-spirited firm is the 32-page annual review of the **Express Dairy Company's** long-service Association. In the words of the chairman of the Company—**Mr. W. A. Nell**—during 1959 there have been "a series of truly wonderful evenings, from the 30-year dinner at the Connaught Rooms to the last of the 20-year parties at Appleby."

The Chairman, who is founder-president of this Association, explains in this attractive booklet that there are now 535 full members (30 years' loyal service), 1,180 associate members (20 years); and it has been decided to recognize other 'loyalists' with a 10-year and an over-40 badge.

At Lewisham, Bath, Rowsley, Bamford, and Horsham, members of the Association have been able to celebrate their years of effort in the usual manner and the photographs of the festivities in the review for 1959 show unmistakably how much these gatherings mean to those invited—and the smiling faces give a similar testimony to the employer's treatment of them over the years.

★

This month's cover

This is no underwater menace — simply an employee discharging acid wet industrial nitrocellulose from centrifuge. But that is not a simple affair; yet, these days, personnel officers are often obliged to know something of such processes. This photo was taken by Walter Nurnberg in the Nobel Division of ICI.

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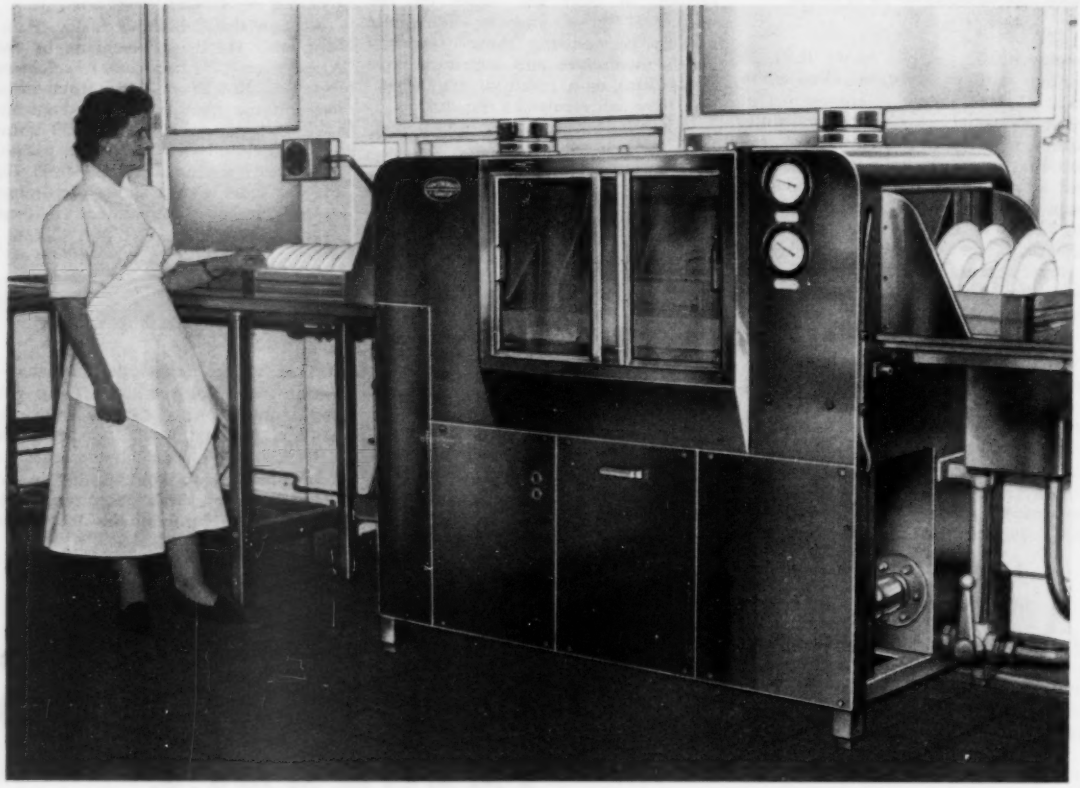

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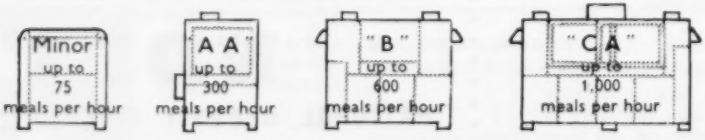

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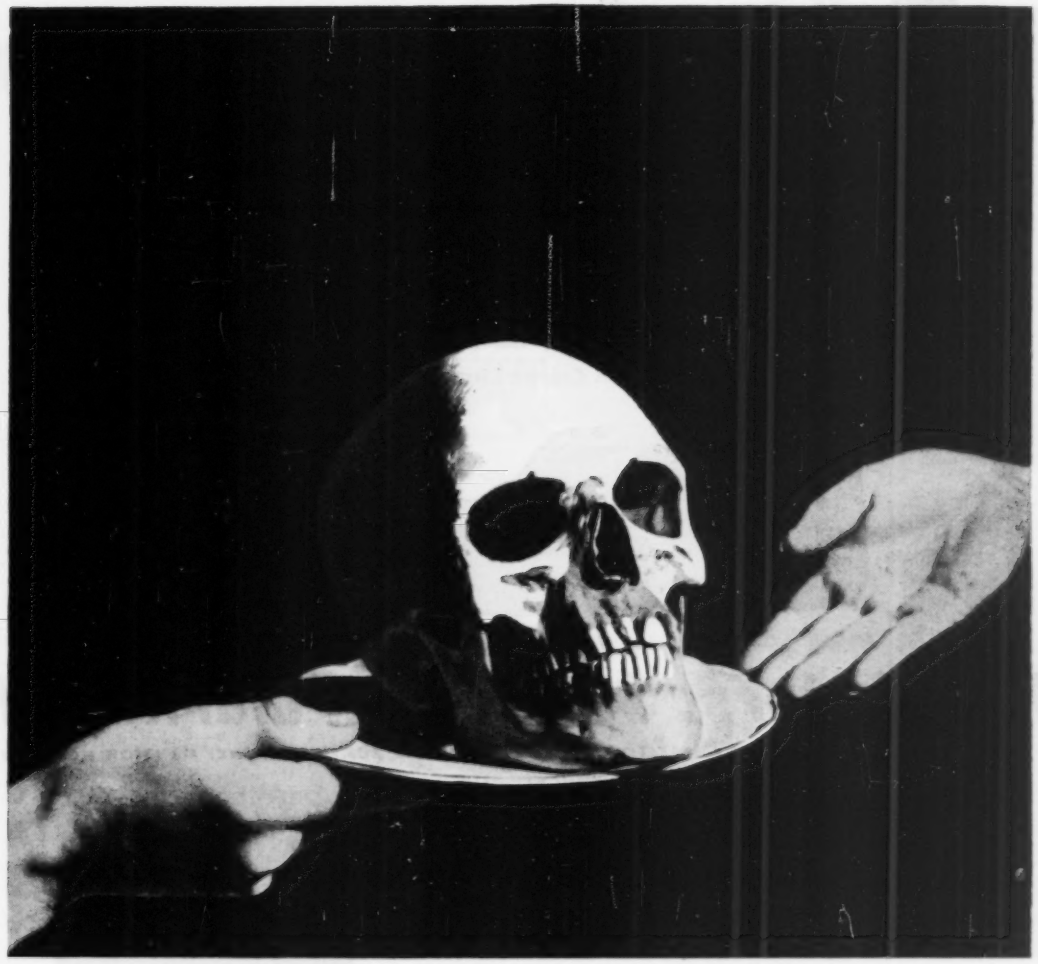

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Are personnel experts underpaid?

by Mark Essendon

HOW many personnel managers subject themselves to job evaluation? How many have indirectly reduced their own salary and career prospects by exhausting the full force of their bargaining powers on behalf of others? These questions were suggested by Dr. George Copeman's 'Annual Survey of Executive Salaries', the first of its kind, in the December issue of *Business*.

It is three and a half years since the Institute of Personnel Management conducted a salary survey amongst its members, revealing that there was no salary scale for personnel specialists, on a national basis; and that, in salary as much as in freedom to develop the function, personnel managers generally were respected and rewarded in proportion to the size of the firm. Although these findings are not directly comparable with the *Business* survey, owing to the fundamental differences in approach, it appears that no significant improvement in the salaries of personnel executives has taken place.

The figures quoted for trainees and assistants in the IPM survey which classified by category (Table I), are easily compared with the Business figures (Table II), which are related to age-groups and are confined to executives; i.e., anyone who is head of a department or in charge of a function.

We can see at a glance from Table I that, in a regular career, an individual might progress from the position of single-handed personnel officer earning £977 (on average), to become a personnel manager in a large company who is paid around £2100. This corresponds roughly (Table II) with the promotion ladder of a 25-year old "nudging four-figures" to a 50-year old executive who will be receiving roughly £2080.

In view of the fact that a man who earns £1000 p.a. today is in the same position as someone who was paid £960 in 1956, (making allowance for changes in the cost of living), it would appear that, although salaries have been increased, many personnel executives are no better off. If this is true, the facts are deplorable, especially when we reflect on Dr. Copeman's statement that "technical and personnel executives are on the whole worse paid than general management, sales and production".

INSTITUTE OF PERSONNEL MANAGEMENT SALARY SURVEY

(Summer, 1956)

Class	Median	Salary Range
1	977	500—1400
2	942	550—2750
3	1367	600—3500
4	1230	600—4000+
5	2100	1000—4000+

Key: (1) Single-handed personnel officer in small company
(2) Assistant/deputy personnel manager in medium-sized company
(3) Personnel manager in medium-sized company
(4) Personnel specialist—head of department
(5) Personnel manager in large company or group of companies

Table I

BUSINESS (Journal for Management) SURVEY

(December, 1959)

Age Group	Average Salary £	Range	
		Lowest £	Highest £
25-29	1000	740	1100
30-34	1630	1140	2300
35-39	1670	875	2750
40-44	1760	1250	3000
45-49	1855	770	3350
50 & over	2080	925	12070*

Table II

***Not included in the average**

Since the peak salary for the majority is earned in the early fifties, if we take the average figures from the 50-54 age group in the *Business* survey, we find that financial management can expect £1910, personnel management £2080, technical and production management £2170, sales £2670 and general management £3360. And this at a time when there is a lamentable shortage of technologists and when even the popular Press is willing to devote as much space to industrial disputes as to film stars.

What can we learn from this?

★ As Dr. Copeman's figures show, there is relative stability in salaries for personnel officers after the early 30's. With only slight inflation, stability means immobility.

★ With more qualified people engaged in personnel work, it seems reasonable that the function will become more closely linked with executive development. This could raise salary prospects. The time has come for personnel executives to be rid of their status-shyness, to advance their function by taking their proper place in the firm's salary structure.

★ As consolation, and possibly inspiration, we should note that of all the *Business* respondents, a personnel manager received the highest salary—£12,070, some £6,370 above the next top salary which was in technical management. Both technical and personnel management were the poorest classes—as groups: but the star salaries were also found amongst them. Obviously, rapid advancement is possible for key personnel men—and, inevitably, this will help others on the same ladder.

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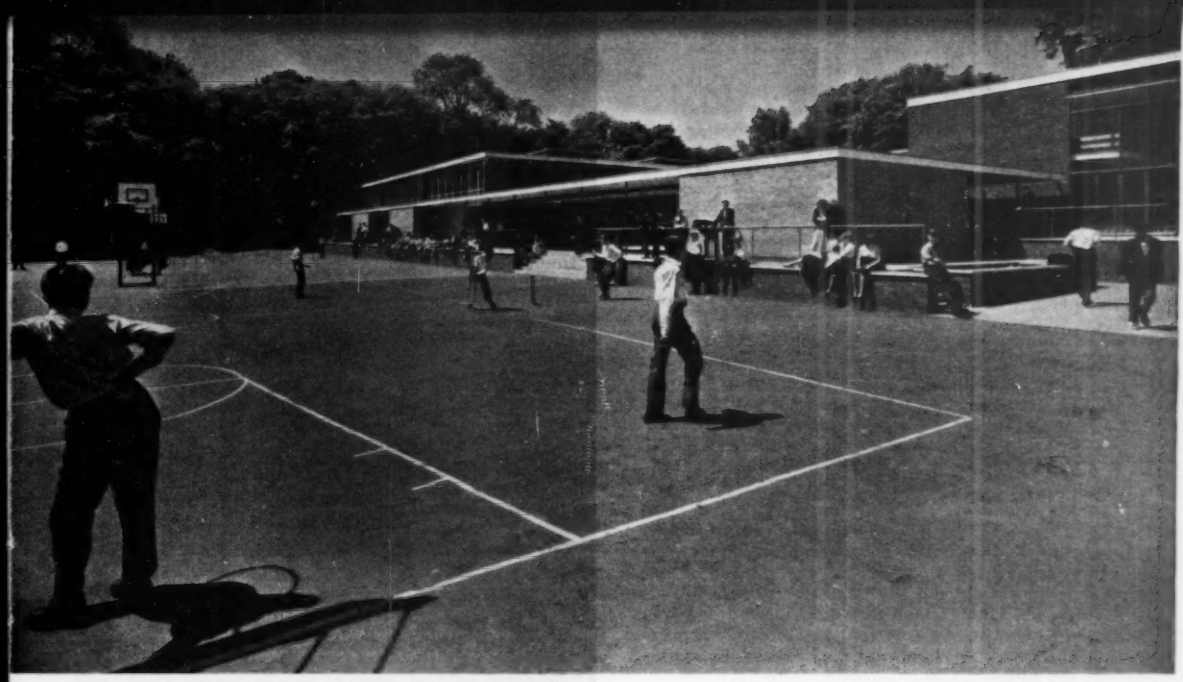

Training schemes must expand to cover all grades of school-leaver—it pays
(LCC PHOTO)

Careers for the unskilled

by Donald Smith
PERSONNEL OFFICER,
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MANCHESTER

IN a recent speech, Sir Thomas Williamson said that " not one in four of those (school-leavers) who apply for apprenticeships has the opportunity of being trained as a skilled worker, and by 1962 it will be only one boy in five ". Whilst agreeing with Sir Thomas' arithmetic concerning apprenticeships, it is appalling to realize that by implication he suggests that 80 per cent of boys entering industrial employment will be engaged on work requiring no skill. When stated in these terms, it becomes ludicrous and obviously not what Sir Thomas wished to imply at all. However, it does state the basic problem facing the country in the field of juvenile employment. Whatever the number of new apprenticeships which may be created, by far the majority of secondary school-leavers will continue to enter jobs which do not bear the magic pre-fix ' apprentice '. This is no new situation: the extra school-leavers expected from 1961 onwards, the ' bulge ', as it is so picturesquely called, will merely aggravate an existing problem.

In this day of the bogy of the eleven-plus examination, we often fail to recognize that (for the successful and the failures) a similar selection applies at 15 years of age in industry, without the saving grace (in most cases) of a well-validated test procedure. The boy who fails to obtain an apprenticeship is separated from his more fortunate brother by a barrier infinitely greater than that separating the secondary modern from the grammar school boy. The educationalists are now beginning to accept that a rigid selection at 11 years is unnecessary and wasteful. Unfortunately, there is no similar movement apparent in industry to remove the apprenticeship barrier.

Providing a rational view is taken, the challenge which faces industry is not how to create more apprenticeships, but how to absorb, train and educate the 70-80 per cent of school-leavers in jobs at present labelled ' unskilled ' and ' semi-skilled '. In modern industry, production and processing techniques are becoming increasingly complicated. The demarcation line between the traditional trades and the operation of some modern machinery in terms of

skill is becoming diffused. Often training for such non-trade work is as lengthy and involved as for trade jobs. Whilst accepting—for the present at any rate—the apprentice system, we should not allow it to cloud the real issue of juvenile employment which is a complex of selection, training and education for employment in an industrial society.

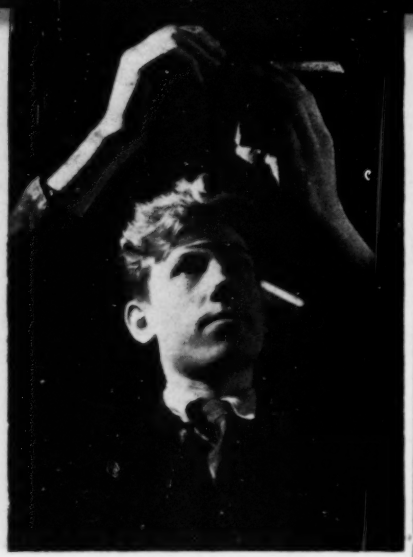
How does this view stand up to reality? The usual industrial employment pattern is this: most firms employ both 'skilled' and 'unskilled' labour. The lucky boy selected for apprentice training is given every facility to gain knowledge and improve his educational standard through day-release courses, internal training courses, etc. His less fortunate brother is often placed in a menial, dead-end job. He can see little prospect of advancement to a job with some status. His only means of expressing his dismay is to leave his job in the hope of securing something less boring, a little less menial; and so he goes on from job to job. In their wisdom, adults shake their heads, unable to understand where the 'couldn't-care-less' attitude towards work and life originates.

This is no new state of affairs. Previously, the problems of juvenile employment had no newsworthy 'bulge' to ensure Press and broadcast publicity. The spectre of high juvenile employment did not loom so large previously, but restlessness and high labour-turnover amongst young 'unskilled workers' has been evident in industry for many years. The increase in numbers after 1960 will merely exacerbate the problem.

Is there an answer to this two-sided problem of both settling the young worker in suitable employment and providing for a greater intake of young workers into industry? Clear thinking by both schools and industry, and appreciation of the problems involved in employing young people, are the basic requirements. Industry must get used to the idea of having a higher proportion of youngsters on its payroll, and must make a determined effort to use its young labour effectively. Merely loading up with extra boys in dead-end jobs will solve nothing and have social implications not confined to work and employment alone. We must realize that we are dealing with children at a most impressionable age, whose view of society and life has been limited by the narrow confines of school and home.

Industry has a responsibility towards these young people which, in a vast number of cases, is not being discharged. In my view, these formative years should be regarded primarily as a preparation period for employment in adult society. The work performed during this time, whilst a most useful contribution, is secondary to the main objective. This in no way implies spoon-feeding. In fact, the responsibility to learn and the degree of direct supervision required would be increased to a standard equal to that applied to an apprentice training.

In 1956, my own company (Small & Parkes Ltd., Manchester) decided to set up a Juvenile Training Programme, based on the arguments postulated above. Before describing the scheme, some brief background details are required. We are a manufacturing company employing approximately 1,200 people, 850 of whom are hourly paid. We produce a wide range of products including friction materials and narrow fabrics. The factory is situated in a densely populated industrial area in which there is keen competition for good quality labour. Apart from maintenance tradesmen, the majority of male employees are classed as unskilled when engaged, and in-plant training is provided. Many jobs require lengthy training and product-familiarization; and it is company policy to appoint suitable shop-floor personnel to supervisory grades.



Firms seem slow to accept the thousands of youngsters needing vocational training outside formal apprenticeships

Prior to 1956, boys were engaged as required to fill specific jobs such as trucking, messenger work and other equally menial jobs traditionally performed by juveniles. Mobility between departments was not usual and a boy who disliked his job would almost certainly leave, as no other suitable vacancy could normally be found for him. Consequently, the tendency was for the brighter boys to leave after a short stay, since they often became discontented more quickly. It was apparent that, if boys were engaged in the traditional manner, there would continue to be no link between juvenile and adult service.

The aim of the course is to provide a steady flow of young workers who will be able to identify themselves with the Company and its interests, in jobs peculiar to the Company but not enjoying craft status. Broadly, the course is equivalent to a general apprenticeship, except that the training period is shorter than that served by a craft apprentice. Ideally, the course fills two requirements:

(1) To give each boy a background training in all aspects of production

(2) To enable us to select suitable boys for future training in technical or supervisory jobs.

The course is not intended to teach the mechanics of a particular job. It gives each boy practical experience in all departments, so that he can decide what type of adult work attracts him. The Company observes his progress and development, which helps in selection and placement as an adult. It is appreciated that most of our adult jobs are classed as semi-skilled or even unskilled in terms of recruitment. However, many require skills equal to some craft jobs. The fact that an organized scheme of training exists to fit a boy for these jobs produces a reaction outside the Company which is wholly beneficial and encourages a good type of boy to seek employment with the firm.

Nominally, the course lasts two years, though the actual period can be varied to suit individual cases. The two-year period was chosen initially so that the training would be completed before National Service call-up. In fact, no boy has been required to join the Services, but the period of two years has been retained. To maintain a regular flow of recruits and to provide a group identity

amongst the trainees, the intake is now limited to mid-summer, when between 6-9 boys are recruited. At present, 15 boys are under training and this number will be raised to 25 in 1960. Selection is carried out among boys either direct from school, or with previous experience in industry but under 16 years of age.

Boys selected direct from school are interviewed before leaving school with the co-operation of the Youth Employment Officer and headmasters of local schools, who have been visited and given a full explanation of the scheme. Selection of the remainder is usually through the Youth Employment Officer or Press advertisements.

The Course is made up of four main sections. Administration and organization of the scheme is the responsibility of one person; in our case, the training officer.

Introduction Course. This section is designed to familiarize the trainees with Company rules and regulations, welfare and social facilities, and to introduce the topics of safety training and industrial hygiene. The course of induction is carried out each morning during this first two weeks of employment. Starting time during this period is fixed at 9 a.m. (instead of the normal time of 7.45 a.m.) so as to reduce the initial contrast between school hours and work hours. The afternoon is spent in the production department to which the trainee is allocated.

Departmental Course. This is the main section of the course. Each trainee is allocated to a production department for a period of one to three months depending on the size of the department. The work of each boy is programmed so that no single department receives more boys than can be fully occupied at any one time. It is this factor which limits the number of trainees in the scheme.

The success of the Departmental Course depends to a large degree on the attitude of supervision. It is essential that any supervisor who has control of a trainee must be familiar with the aims of the course, and not look upon his temporary charge merely as an extra pair of hands. Also the boy's attitude towards the Company—and his future—is influenced by his contact with the supervisor. It is obvious that a pre-requisite of training of this type is its full acceptance by line supervision at all levels. In practice, this means that the supervisor must become accountable for the progress of the trainee whilst in his charge. We have found that this is achieved by making the day-to-day discipline and supervision of the individual trainee the responsibility of line supervision. We also receive a detailed progress report on each boy from his departmental supervisor at the end of his stay in the department.

The Departmental Course is naturally the backbone of the whole programme. Each boy's aptitudes can be studied and he can work out, in his own mind, the type of work he likes best. Not surprisingly, these two factors often coincide. From the boy's own point of view, he is relieved of the continuing frustration of a job he may not particularly like, because he knows that in time he will be transferred to his next department.

Further Education. All the trainees are required to attend one of the local Technical Colleges for one full day each week. Up to the present session which started in September, they took one of two City and Guilds' courses—either M.S.E. or Mechanical Craft Practice. In both instances, the content of the course was too far removed from the boy's day-to-day work; and this created a feeling of discontent with the course. Happily, because of the interest taken by the college principal, a special course was created to concentrate on general education, with a certain amount of craft training which is related to the type of work and materials encountered by our boys at work.

Monthly Group Meetings. From the outset, it was realized that ideally a group identity should be encouraged between the trainees. This is fostered by monthly meetings which have two aims:

(1) To bring the trainees together as a group

(2) To give instruction by means of films, talks and discussion, on such topics as safety, work study, hygiene and also give an idea of work in other industries and commerce generally.

The reconciliation between the selection for the Juvenile Training Scheme and apprenticeship for craft trades was resolved from the start. We decided that all boys joining the Company at 15 should be classed as 'juvenile trainees'. Selection for craft apprenticeships is delayed until late in his sixteenth year when a boy has completed most of his general training and his abilities have been assessed; he is then simply diverted into a different category of work, while still remaining a member of the trainee group.

The scheme has been in operation for three years and is now the accepted feature of our employment policy. Several conclusions are evident from experience gained during this time.

(1) Boys of fifteen, although often set on a particular career when leaving school, are generally ill-informed on conditions and openings available to them in industry. Their choice of career is usually determined by quite irrational motives such as a father's or older brother's job. Their knowledge of the range of work available in industry is limited to the information received from the Youth Employment Service and Careers masters appointed by the schools. With the best will in the world, the information they receive from these sources is limited. If the first job a boy receives does not measure up to his preconceived ideas, it is quite likely that he will leave this job. Facilities for transfer within the Training Scheme reduce this possibility. Labour-turnover of Juvenile Trainees is less than half the turnover experienced in a similar age group before the introduction of the scheme.

(2) The majority of jobs allocated to new entrants into industry are often of necessity menial and boring. A scheme such as the one described tends to reduce the significance of this by maintaining interest whilst providing for the completion of the tasks.

(3) The Scheme allows for employment of boys of many different types and aptitudes who could not have been found suitable jobs within the previous employment structure.

(4) The framework of the Scheme can be suitably adapted to accommodate any changes in national policy affecting juvenile employment.

Occupational Cancer —known causes

by Dr. E. E. Lieber

MEDICAL OFFICER, MICROCELL GROUP OF COMPANIES

THE disease which we call cancer is an excessive growth of cells which may occur in any part of the body, although it has a tendency to invade adjacent tissues or to travel long distances by way of the lymphatics or the blood stream. Clinical medicine has to deal with various types of cancer, and many of them are of unknown origin, but occupational cancers have characteristic features and origins which are, for the most part, identifiable, and so are more easily dealt with. When such a cancer develops, it is nearly always in persons who have been exposed to localized chemical irritation for a long time. The period will vary, between anything from two to ten years. Moreover, even though a man is removed from his occupation after a certain period of exposure, he may still develop a cancer years later.

Industries which are known to carry a risk of cancer of the lung are the nickel, chromate and asbestos industries, and some chemical manufacturing processes—notably the manufacture of sheep dip and some insecticides. In the nickel-refining processes, althouh cases of lung cancer have been reported in the past, it is not yet certain which of the substances used is responsible. However, there were, at one time, a number of cases among men engaged in the grinding of chromate ores which contained large quantities of arsenic; and here compounds of the arsenide and arsenite groups came under suspicion as possible agents of cancer formation in the skin and lungs. The mortality rate for cancer in chemical workers handling arsenic is double that of the rest of the population in the same locality.

Occupations which have been known to cause cancer of the skin are chimney sweeping, and those entailing the handling of tar, pitch, anthracite and shale oil. People handling pitch get a skin irritation called "the smarts" which makes it sensitive to the actinic rays of the sun and thus paves the way for a cancerous condition. Employment in gas works or coke-oven plants renders workers liable to cancer of the skin. Other industries which entail contact with these substances are the impregnation of cloth or paper for damp-proof courses and roofing felt. A number of oils may be responsible for producing cancer: shale oil, rangoon oil (used by gunsmiths) and sumatra oil, which is used as an anti-malarial spray, and can cause cancer of the fingers through handling.

Once the existence of an occupational carcinogen has been recognised, the route by which it enters the body must be discovered. It can be absorbed by ingestion or inhalation (thus causing cancer of the lungs), or through the skin. This will, of course, depend on the physical properties of the materials concerned. The skin will absorb substances in contact with it if they are in the form of dust, powders, in a molten state, fumes, or in solution. The cancer will occur most commonly on those parts of the body which are the most exposed: the head, neck, forearms, wrists and hands. Cancer of the scrotum is fairly common, owing to the wearing of oil-soaked trousers.

The ingestion of carcinogens takes place mainly through the radioactive paints. Some years ago there were several fatal cases amongst girls employed in painting luminous watches. It was discovered that they were in the habit of putting the brush to their lips, to give it a neat point. Radioactive material can also be inhaled and may cause lung cancer. No cases have been reported in Great Britain, but there have been a few in the U.S.A.

The most serious of carcinogenic hazards is dust. As we have seen, when absorbed by the skin it causes skin cancer, which is more easily cured; but absorption into the body by inhalation of dust, fumes or vapour can cause lung cancer, which may be fatal. In the asbestos industry, cancer of the lung is known to be associated with a condition known as pulmonary asbestosis. The 1955 report of the Chief Inspector of Factories shows that there is a definite correlation between asbestosis and cancer of the lung. It points out that between 1924 and 1956, 48 out of 222 men and 17 out of 143 women had both asbestosis and cancer of the lung. Hematite miners, foundry workers, and persons engaged in grinding ores are exposed both to iron and to silica: in these industries, too, cases of lung cancer occur.

At the root of the problem is the mystery of growth. The question is: what stimulates the growth of cells in such a way as to determine the shape of any living organism or of any part of a human body? This is the main problem and, until we have a complete understanding of those factors which control growth, it is unlikely that we shall find a way to control abnormal cellular growth. To many of us the word 'cancer' has frightening implications, and yet there are some tumours which are relatively harmless. Cancers of the skin (like the rodent ulcer), rectal polypi, and some neo-plasms of the prostate can be cured or held in abeyance by general or local treatment.

It is the spreading type of cancer, (for example, cancer of the lung, stomach or uterus, the two latter being non-occupational) which is to be feared, since treatment is more difficult to carry out. As yet, comparatively little is known about the control of this type of cellular growth, although research continues.

The concept of cancer-development is twofold. It is believed that cancer occurs, either through an injury which causes a breakdown of the normal control mechanism of the direction of growth, or by a mutation in the cell itself, a change which makes it intransigent to the factors that normally control it. It has been known for a long time that frequent injuries and prolonged ulceration sometimes lead to cancer. An experiment which demonstrates this, i.e. the removal of control, is one in which living cells are taken from their environment and put into a tissue culture, where they quickly become adjusted and go on growing.

But if these cells are transplanted back to the animal from which they originally came, they behave like cancers. Another example of the development of cancer as a result of the removal of controls is the one reported by Oppenheimer in 1956 which he calls "physical carcinogenesis." If a small piece of plastic material, bakelite, cellophane, or one of the chemically inert polyfluorethylenes is buried in the tissue under the skin of a rat and left for a few months, cancer develops in the pocket where the foreign body was implanted; but if this piece of plastic is perforated with small holes, no cancerous growth develops. In this experiment, the development of a cancer is dependent on the degree of impermeability of the foreign body: a cancer occurs because the connective tissue cells have been separated from the controls.

Tracking sources

The chemical substances enumerated above (which are known to be capable of causing cancer), do so by indirect means rather than by a direct action upon the cells. A common experiment is to paint a small area of the skin of a mouse with some chemical known to be one of the carcinogens. This patch of skin is then removed and grafted on to another part of the animal's body. A cancer then grows, not on the transplanted, chemically treated skin, but in the area from which the skin was removed. This obviously suggests that the chemical carcinogens exert their effect indirectly, by the suppression of a substance which controls the growth.

While research goes on, we are forced to conclude that the essential task of industry is the prevention of occupational cancer. Thirty years ago there was a relatively high incidence of cancer of the nose and lung amongst workers in the nickel-refining industry. But, since 1924, methods of working have been reviewed, and reports published in 1958 state that, through the careful efforts made by this industry to suppress dust, and because of a high standard of medical supervision, no deaths from this type of cancer have been recorded.

Work conditions

Preventive measures required in any industry where carcinogenic materials are handled include the improvement of ventilation to reduce the inhalation of dust, and the introduction of wet drilling methods. Hours of work may be reduced with advantage and schemes introduced for frequent holidays and early retirement for all mine workers. In addition, workers should be provided with protective clothing and adequate washing facilities. Barrier creams also appear to be of some value. One vital principle should be observed whenever possible: safe materials must be substituted for those with carcinogenic properties. For example, where there is contact with mineral oils, it is often possible to use 'white' or vegetable oils. However, if substitution is out of the question, it is sometimes possible to introduce remote working techniques, or anti-splash devices and filter systems in engineering, as well as other protective devices of the kind used for ionizing radiation (see P.M. & M.: June, July, August 1959). It is especially in industries where there is contact with oils that the doctor, the personnel officer and the chemical engineer must co-operate in devising methods to prevent contamination.

One further point to be mentioned: skin cancer, or a pre-cancerous skin condition in a worker, does not imply that he must immediately change his occupation. It is far better to review his working conditions and allow him to continue working, under careful medical supervision.

In considering the safety measures against occupational carcinogens, we have to examine the aspects of personnel selection in industries entailing cancer hazards. In selecting workers for an industry in which, sooner or later, they may be in danger of developing a cancer, a number of factors must be taken into account. First, the genetic factor. At the pre-employment examination, the medical officer must ascertain whether there is any family history of occupational cancer; in this connection, it is sometimes useful to know the father's trade and something of his medical history.

Then there is the age factor; the prospective employee should, ideally, be a young, healthy adult. It has been observed that, provided the conditions of work are satisfactory and risks reduced to the minimum, young persons are the least likely to develop cancers. Finally there is the health factor—and this is most important. If the carcinogenic hazard is one which affects the skin, it is obvious that people with skin disease, or sensitive skins, should not be employed. If carcinogenic dust is involved, that excludes workers with shortness of breath, and sufferers from asthma, bronchitis and cardiac conditions.

If we include cleanliness as a criterion, the dirty worker should never be permitted to continue working in a dangerous toxic process. It is the duty of the personnel officer, through the foreman, to see that cleanliness is strictly observed; and, in this connection, since the health of a man has a great deal to do with his habits, nail biting, tobacco chewing, sucking of sweets, or taking snacks at the work bench, must be prohibited.

Conscious aim

The employer, on his side, has the duty to inform the worker, in the clearest terms, what these hazards entail. Of course, the worker's reaction will depend on his degree of intelligence but, provided the employer goes to the limit in precautions, and the employee exerts all his faculties in careful adherence to those precautions, his safety can be reasonably well assured. We must stress, too, that adherence to the requirements of the Factories Act represents the minimum.

Constant research in the industrial laboratories will eventually cast more light on the nature of these exceptional occupational conditions. As the industrial world becomes more dependent on the products which the chemist creates, we have an obligation to keep pace with new hazards by an increasingly efficient system of prevention and protection.

by O. T. Curtis

Full marks and full houses for two safety films

MANCHESTER PLUMBER HELPS TO SAVE STEELWORKERS' LIVES ran the heading to a panel in a full-page advertisement in the national Press sponsored by the British Iron and Steel Federation. It is unusual to have advance publicity of this kind for an industrial safety film. But then the film referred to indirectly is an unusual one—a landmark in safety film production.

It all followed from Richard Grindal, of the Public Relations department of the Federation, seeing the United States Steel Company's film **Knowing's not enough.** This was a novel film but U.S. Steel are no beginners at safety-film making. Their first, **The workman's lesson,** was made as far back as 1912, and was followed by **Why?** in 1913 and **The reason why** in 1914. **Knowing's not enough** showed a new approach to an old problem—how to use film to make people safety-minded.

A colour film, running for 28 minutes, it opens unconventionally with preparations for a motor race. Four amateur enthusiasts (all colleagues in a steel plant), have entered a Jaguar XK 120 for a sports race. Their car is still not ready as their competitors are marshalled on to the starting grid. Urged on by the impatient driver and the pleas of the public-address system for the missing car, the three voluntary mechanics hurriedly complete their jobs and the car is rushed to the starting line. The flag falls and the Jaguar builds up a commanding lead when, suddenly out of control, it crashes spectacularly. The driver, seriously injured, is rushed to hospital. The public-address system crazily repeats a bar from a hit tune as, in his agitation, the commentator knocks the sound head across the record.

Back at work, the three friends discuss the crash with their superintendent. Each blames himself for negligence in the final preparation of the car. There is a safety lesson to be learned here, urges the superintendent. Why not incorporate the yellow flag, used as a warning signal in the race, in the new safety campaign he is planning? It is based on an elaborate poster campaign featuring four Imps—IMPatience, IMProvising, IMPunity, and IMPulsiveness. The yellow flag might become a symbol in the campaign.

In due course, each of the three men is nearly involved in an accident. About to take a short cut between some wagons on the works siding, one of the trio stops as he remembers the yellow flag—and watches, in fascinated horror, the buffers crash together as they are shunted. The second is about to make a minor electrical repair without switching off and locking the mains supply, when he recalls the flag—and imagines what might have been the consequences just when a fellow worker goes to the unguarded switch and closes the circuit. The third prevents his wife from having a serious fall when she is about to use a kitchen chair and a half-open drawer as a ladder to reach a defective light bulb.

This is an interesting film because, whilst designed for use in a steelworks, it is applicable to any human situation. It succeeds because it is based on a simple thesis—that many employees know basic safety rules but some neglect to apply them. "Knowing's not enough," says the film. You must anticipate the possible hazard in every situation.

Hazard was inspired by this American film, at a time when the Federation's Safety Committee was considering a positive approach to the problem of accident prevention. The British film was intended to convey the idea that to be safe is to be professional; that safety precautions are not 'cissy'. When the film opens we see a maintenance worker perched high on his cradle on a blast-furnace chimney. Later we meet him in the changing room, discussing a forthcoming rock-climbing holiday in the Dolomites with the friend who will accompany him. Another worker, contemptuous of safety regulations, listens to their conversation, and grumbles when hit on the toe by the climbing hammer which one of them drops (it would not have hurt him if he had worn safety boots). Leaving the room, he takes a short cut through some wagons in the yard, blissfully

KNOWING'S NOT ENOUGH
16mm — sound — colour — 28 min — U.S.A., 1957
Wilding Picture Productions Inc. for United States Steel

HAZARD
16/35mm — sound — colour — 26 min — Gt. Britain, 1960
Interfilm Production for the British Iron & Steel Federation
Both obtainable on free loan from the British Iron & Steel Federation Film Library, Tothill Street, London, S.W.1.

Safety without tedium. Two dangerous situations in the BISF film 'Hazard' give fresh associations to worthy but threadbare principles

unaware as they crash together noisily behind him—a neat echo of the original American idea. The others watch in alarm through the window and later, when an ambulance dashes through the yard, bell clanging, they wonder if their careless colleague "has bought it."

Back home, the two friends prepare their equipment. The natural leader of the pair has bought two new lightweight, safety helmets to protect them against falling stones. His friend scoffs at the idea—and anyway his new woolly hat is more glamorous! It's all a matter of habit, argues the other, and if you have habits you may as well have good ones.

In the Dolomites, the weather is unsettled when they set out to climb. Near the top of the sheer face they are scaling, the leader is stunned by falling rock and only saved from more serious injury by his safety helmet. His friend prepares to rope down to seek help. Securing one of his pitons badly, he swings his hammer and loses it, having neglected to wear the safety loop. Now his descent is perilous indeed and ends in disaster when the piton pulls out. Luckily he falls on a ledge, and is subsequently rescued after a remarkable rock climb by his friend, to whom he confesses that in a long and terrifying night, he had plenty of time to think about good safety habits, and recalls the hazards in the steelworks. So we are taken back for a quick glimpse of hazards with electrical equipment, with a cobble in the rolling mill, and with some of the other dangers inseparable from men working among machines.

As entertainment this is all first-class. **Hazard** is worthy of a commercial release. If it is released, let us hope that those responsible have the courage to retain the closing factory sequences. The incentive to remove them will be strong for the exciting rescue on the rock face is a fine story in itself, and in an idiom the filmgoer understands. To switch from the rock face to the shop floor could seem a shocking anti-climax. In fact, it is not—simply because the transition is skilfully accomplished by switching the burden of the narrative to commentary by the injured man.

Hazard is exciting — well made, beautifully photographed. With Joe Brown (the Lancashire plumber credited by *The Observer* with being one of the six best rock-climbers in the world) standing-in—if that is the appropriate phrase—for the leading actor, *who* could fail to be thrilled by the climbing? The film unit certainly was, and gave a spontaneous burst of applause when Joe conquered the sheer rock face which had never been climbed before.

But it is not enough that such a film should entertain. It must get the safety message across. Does it? It was typical of the enterprise shown in this whole project that the British Iron and Steel Federation should have invited some apprentices and the chairman of the Safety Committee of John Lysaght's Bristol Works Ltd., to a private preview of the film. The immediate reaction was perhaps not the one anticipated: "It makes me think more than ever that there is no future in rock climbing," remarked one apprentice as the lights went up. But the film which can convey a general principle has done a useful job. The American film had done just that apparently. Most of the apprentices had seen **Knowing's not enough** over a year ago. One remarked: "You still hear people talking about the yellow flag."

What comparable symbol can **Hazard** offer? **Hazard** will help workers to become more safety-minded. "I think a chap new to the industry who sees this will get a flash-back when he gets near something hot." But its message is not just for steelworkers, but for us all. With a minimum of industrial situations, and the main story on a sport strange to the majority, this film has an appeal for a wide audience. It should succeed without the gimmicks which accompany the American film—"One cut-out Imp on ¼-in. upson board 60-in. high, complete with 4-ft easel of 1 x 2 white pine and hinged with cloth tape," or "Desk flag can be used as a constant reminder to supervisors at their desks. Can be placed on the desks of all supervising personnel from the President on down." Perhaps we do not need all that. But we do need the stimulus of a powerful film to remind us that knowing's not enough. And **Hazard** will do just that.

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Three forms of leader-culture

A PERSONNEL manager responsible for the development of executives in his firm describes how their merit-rating scheme works:

"In the November issue, you described the counselling interview which may be part of a merit-rating scheme, as taking place after the assessment has been made. In our firm we do things rather differently. The main interview is held between the manager, who is being assessed, and his board of assessors, before the the merit-rating form is filled in. The manager concerned knows the headings under which he is being considered, and the board discuss with him his position in relation to each heading. We often find, in these circumstances, that the manager himself will say such things as: 'I know I'm a bit hasty tempered,' 'I'm trying to control this,' or 'I feel very inadequate when I have to interview someone for a vacancy in my department—could you give me some help on how to do this more efficiently?' and so on. Such an interview gives everyone the opportunity to clear the air, and to look into the future. The manager being assessed is not labouring under the disadvantage of feeling he has already been judged."

I think this is a valuable contribution to our discussion on the subject. It is a practical method of reconciling the two kinds of merit-rating interview ('tell and sell' and 'problem-solving') described in the January issue. At such an interview, held before assessment, both methods of approach can be used according to the needs of the situation and of the individual. Another advantage of this method is that executive development, if it is to be successful, must always have two sides to it: the company's and the employee's. An employee has as much need to see clearly the possible lines of future development open to him, as the company has to feel confident that he has the potential to take on widening responsibilities. This kind of interview satisfies both requirements.

The scholarship path to management

There is a further angle to which some companies are giving much thought. Executive development begins with executive recruitment. Many companies regularly recruit a number of university graduates. Some companies are starting at a stage further back than this, and are giving university scholarships each year to schoolboys (selected by the firm's experts) as potentially useful future material for their particular business. The qualities required are not only academic distinction, but also personal qualities—such as forcefulness, depth of interest and vision. Some companies try to choose a 'mixed bag' since they recognize that future managers must possess a wide range of talents. So one company gives scholarships to 'junior boffins' as well as to boys who appear to possess potential management qualities.

What happens when you have to help others to delegate responsibility? How do you exert a creative influence in a development process?

A guinea will be paid for each letter published.

Turning now to the "lonely art of decision-making"—which we raised in the December issue—I have had a most interesting letter from the managing director of a small machine-tool business. He feels that decision-making is a more complex activity than I have suggested. He says:

"Often, the major problem is not to encourage subordinates to make decisions, but to ensure that they are making good ones (i.e. decisions one would make oneself). To give you one example from my recent experience. Our business is prospering, and I have recently taken on a manager to do the detailed work (running the works) that I used to do myself. For various family reasons, he was keen to settle in this neighbourhood and was absolutely determined to make a success of his new job. In no time he was here, there and everywhere, sorting out queries, handing out admonitions and advice, and giving orders. I put up with it for three weeks and then I could stand it no longer. I called him into my office and I said 'Mr. G—— if you and I are to continue together, I want you to be 85 per cent less efficient than you are at present.'"

So this managing director went on to teach his new manager the methods and traditions on which he had run his business so far—that he trusted people to get on with their work, that his supervision was gentle and indirect, and his orders few and only given when absolutely necessary. Luckily, the new manager 'saw it his way' and learned his methods: today they are an effective working team. The managing director concludes his letter by saying "Girls prefer working for us although they can get higher pay down the road, but at that factory every movement is supervised—even when they go to the toilets they are timed—while here they have good working conditions."

This situation raises some of the more fundamental aspects of decision-making. Many of us have felt the frustration of watching our subordinates making mistakes on jobs that we feel we can do well ourselves. This feeling is particularly acute when, as in the case of this managing director, we have built up the business and feel it is ours. Nevertheless, he took the wise course—he continued to delegate the responsibility to his manager, but he taught him to improve. What is your experience, when you delegate responsibility?

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In breach but not liable

CAN injured employees always rely on being able to extract damages from an employer if there has been a breach of the Factories Act—however careless they themselves have been? Employees should realize that the answer is 'No'—in spite of legislation designed to shield factory workers from the consequences of their own carelessness. A recent example of this, and of the value of really good safety measures, was a case at Manchester Assizes involving the firm of Turner Bros. Asbestos Co. Ltd., and an employee named Rushton.

Careless act

This man was employed by the firm to operate a fibre-crushing machine which consisted of a rotating fan with two connected rotating stones inside it to perform the crushing action, and scrapers to clean the pan surface. The crushed fibre was discharged through a trap door in the base, and the door opened and shut by sliding along grooves. It was fitted with a handle and worked by the machine operator. From time to time, the grooves became clogged by some of the crushed fibre collecting in them and sticking to the sides, and the operator had to clean them out. Normally he did so by putting his hand through the trap door to reach the grooves. But to attempt this, while the machine was working and the stones were rotating inside the pan, was obviously dangerous. Nevertheless, that is exactly what Rushton, the plaintiff in the action, did. In the words of the trial judge, it was "a crazy thing to do". The tips of the four fingers of Rushton's left hand were crushed and had to be amputated.

He had come on to the machine at his own request about six months previously and his job was to feed it at regular intervals and collect the crushed fibre from the outlet chute.

The judge observed that Turner Bros. were fully aware of the importance of safety precautions. A card had been produced before him headed "Safety in the Factory", with a space for the employee's signature at the bottom. The card said that no part of a machine in motion must be touched "except those parts which form part of your normal job and which you have been instructed to do by the foreman in charge or a duly appointed teacher operative". The plaintiff had admitted being given one of these cards. His Lordship indicated that he had been most impressed by two witnesses called by the firm, Mr. Southworth, a safety officer, and a Mr. Butler whom Southworth had placed in charge of Rushton's instruction. Mr. Southworth had given evidence as well as anyone could and was entirely truthful.

He had said that, after Rushton had been given a half-day's training, he had examined him for a good hour and stated: "Unbeknownst to him I watched him for three days at different times . . . and considered he was a highly satisfactory worker on that particular job." Southworth had declared further that he had seen Rushton clean the grooves in the proper way, with the machine stopped and using a knife provided by the firm. Nobody had seen a man attempting the appalling and dangerous practice of cleaning these grooves with the machine running. Mr. Southworth had given evidence that if he had seen a man doing so, he would have told him off roundly the first time, and the second would have been the finish. "I believe that," continued his Lordship, "and, from the common-sense angle, it was something the firm hardly had reason to contemplate as likely to happen." But it was not only the sensible workman who was covered by the Factories Act. He would have been very ready not to find the firm in breach; but the machine could have been fenced and had been since the accident, and he felt it just came within the Act.

The main defence was the plaintiff's folly. He could have stopped the machine by stretching out his right hand. On the day of the accident, a part of the top edge of one of the grooves had broken away, but it had been decided that the machine could continue working. Rushton had asked Butler where the piece had come from: he had been shown, and knew that there was nothing whatever to stop his hand coming in contact with the stones.

No compensation

He had deliberately inserted his hand and now said that his employers should compensate him for something entirely his fault. The effective cause of the accident must be wholly attributed to the plaintiff. Cases in which defendants in breach of the *Factories Act 1937, Sect. 14 (1)** could avoid all liability were rare; but here the plaintiff was the sole author of his own misfortune.

Accordingly, his Lordship held that the action failed and that the firm, while they had committed a breach of the Factories Act, were not liable to the plaintiff.

Good safety measures do provide a very real protection to a firm against heavy claims for damages; and employees who may be tempted to be careless should remember that, in law, the question "Whose fault was it?" must still be answered.

* *Sect. 14 (1) "every dangerous part of any machinery shall be securely fenced unless it is in such a position or of such construction as to be as safe . . . as . . . if securely fenced."*

"KEX"

Dust control system offers:

BETTER CLEANING

The dirt is collected and removed with the "KEX" system — not merely stirred into the air and re-deposited on to other surfaces.

AT LOWER COST

Sweeping and dusting is done so much quicker with this system that at least 25% of the time previously spent on this work is saved or made available for other cleaning duties.

WITH LESS EFFORT

The dust cloths are impregnated with a chemical which attracts dirt yet leaves no streaky residue behind. Each sweep of the brush or duster leaves a perfectly clean surface as it glides over it, collecting the dirt with the absolute minimum of effort.

"KEXADIZED"

. . . for your protection and sanitary cleaning. Chemically treated with a germicidal and fungicidal compound to inhibit the growth and spread of disease-causing bacteria, and to reduce contamination—in the cloth and on the area cleaned.

Now **'KEXADIZED** *for your protection!*

Your cleaners will have no difficulty at all in using the "Kex" system —it's child's play! The cover is slipped over the sweeping tool and then the floor, wall or ceiling can be dusted with long easy strokes.

No pressure is needed—the scientifically positioned bristles plus the light weight of the tool ensure that all the dirt is gathered with each stroke leaving a perfectly clean surface. What is more, the wide area of the sweeping tool with its cover cleans a large area with each stroke thus completing the job in the shortest possible time.

Write or telephone for demonstration.

"KEX" Service for Machinery Cleaning Cloths

This long-established "KEX" Service provides a regular weekly delivery of sterilized cloths specially made for cleaning machinery — far better than rags and half the cost! On a fixed day each week our Van calls and collects all soiled, worn cloths and replaces with clean, sound ones. We loan the stock of cloths; lost cloths are replaced without extra cost. The Service operates simply and automatically and is on a rental basis involving no outlay for stock.

LK3

Write for further details, quoting reference PM.1.

"Kex" BRITISH SERVICE SERVICES FOR INDUSTRY

Leeming Brothers *Limited*

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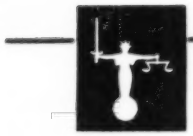
"Kex" *Covers the Country*



RIGHT SIDE OF THE LAW
by COUNSEL

In breach but not liable

CAN injured employees always rely on being able to extract damages from an employer if there has been a breach of the Factories Act—however careless they themselves have been? Employees should realize that the answer is 'No'—in spite of legislation designed to shield factory workers from the consequences of their own carelessness. A recent example of this, and of the value of really good safety measures, was a case at Manchester Assizes involving the firm of Turner Bros. Asbestos Co. Ltd., and an employee named Rushton.

Careless act

This man was employed by the firm to operate a fibre-crushing machine which consisted of a rotating fan with two connected rotating stones inside it to perform the crushing action, and scrapers to clean the pan surface. The crushed fibre was discharged through a trap door in the base, and the door opened and shut by sliding along grooves. It was fitted with a handle and worked by the machine operator. From time to time, the grooves became clogged by some of the crushed fibre collecting in them and sticking to the sides, and the operator had to clean them out. Normally he did so by putting his hand through the trap door to reach the grooves. But to attempt this, while the machine was working and the stones were rotating inside the pan, was obviously dangerous. Nevertheless, that is exactly what Rushton, the plaintiff in the action, did. In the words of the trial judge, it was "a crazy thing to do". The tips of the four fingers of Rushton's left hand were crushed and had to be amputated.

He had come on to the machine at his own request about six months previously and his job was to feed it at regular intervals and collect the crushed fibre from the outlet chute.

The judge observed that Turner Bros. were fully aware of the importance of safety precautions. A card had been produced before him headed "Safety in the Factory", with a space for the employee's signature at the bottom. The card said that no part of a machine in motion must be touched "except those parts which form part of your normal job and which you have been instructed to do by the foreman in charge or a duly appointed teacher operative". The plaintiff had admitted being given one of these cards. His Lordship indicated that he had been most impressed by two witnesses called by the firm, Mr. Southworth, a safety officer, and a Mr. Butler whom Southworth had placed in charge of Rushton's instruction. Mr. Southworth had given evidence as well as anyone could and was entirely truthful.

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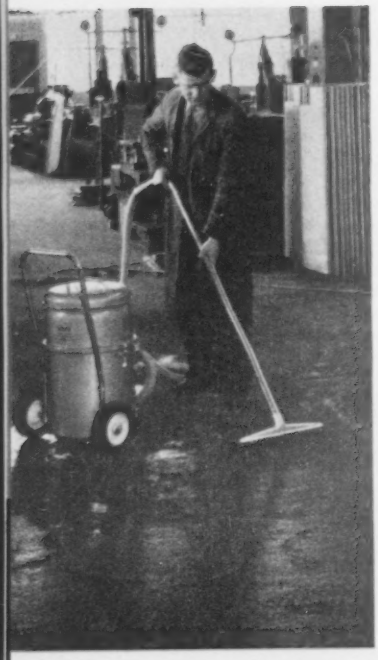
AIDS TO . . .

Good 'Housekeeping'

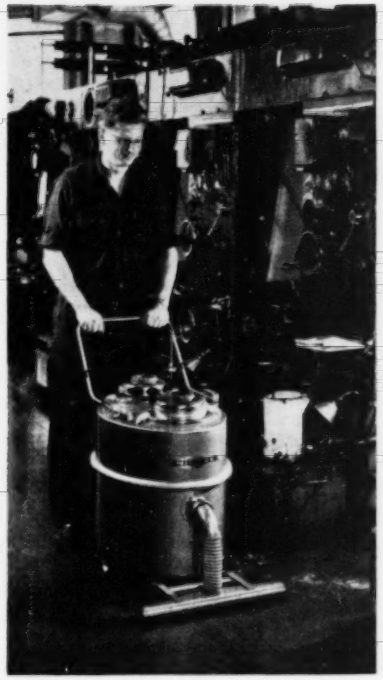
WORKING conditions in offices, factories and hospitals have undergone vast improvements in the last decade or two. Nevertheless, the initial gleam and tidiness are soon lost unless steps are taken to provide thorough cleaning services. These pages present some of the new equipment available for use in the campaign to maintain a first-class working environment. Mechanical aids can reduce the man-hours spent on cleaning: we should remember, as a perspective, that the average percentage man-hours spent on housekeeping in British factories of medium size is 15 per cent—although it often rises to 20 per cent.

The mechanization of cleaning services has other advantages. Labour shortages no longer check the progress of your cleaning and maintenance schedule. The acceleration of cleaning means that, even if production has to be suspended for a time, the number of lost manufacturing units is reduced to an acceptable minimum. Mechanical aids also allow the whole premises to be cleaned more often and more thoroughly.

With flat, metal trowels and nylon 'Fluibrush' attachment, this wall-washing machine can clean wall surfaces, ceilings and penetrate awkward corners. Manufactured by Revvi Ltd., London



The Kent Quiet Junior (Kent Floor Machine Co. Ltd.), is a dual-purpose vacuum/squeegee capable of lifting five gallons of water or ⅔ bushel of dry dirt



▲ *A special feature of the Model G.72 suction cleaner is that exhaust air can be used for blowing and spraying. It is a product of Tellus Super Vacuum Cleaner Ltd. Mortlake, London, S.W.15*

This Kex sweeping tool ▶ *(Leeming Bros., Salford, Lancs.), can be used with chemically-treated cloths to ensure sanitary cleaning*

◀ *A tank fitment to this G.E.C. polisher converts it to a scrubber which will clean 1,500 sq. ft of floor in an hour*

▼ *The multi-purpose 'Littervac' collects and separates paper, litter, match-boxes, leaves and grit as well as sand or fine dust. It has a total capacity of 140 lb of dust, grit, etc., plus 2.5 cu. ft of litter*

Combined suction polisher and vacuum cleaner, the Model 111 Columbus is available with a full set of dusting tools for floor-to-ceiling cleaning (Columbus-Dixon Ltd., Wembley, Middlesex)

BOOKSHELF

MOTIVATION ★ EXECUTIVE DEVELOPMENT ★ TRAINING ★ SOCIOLOGY

Manager Selection, Education and Training, by Willard E. Bennett. *McGraw-Hill. 48s. post paid.*

THE DEVELOPMENT of management personnel at every level—from supervisors to top executives—is the scope of this book, which would be most useful to personnel managers starting an executive development programme and even in evaluating an existing programme.

Every grade connected with the development process is shown how the various phases of planning and implementing a programme can become truly effective. How to arrange the proper climate and conditions to increase the supply and improve the performance of managers is discussed in great detail.

The Motivation to Work, by F. Herzberg, B. Mausner and B. B. Snyderman. *Chapman & Hall, 37s. 6d. post paid.*

THIS BOOK REFLECTS the observations and conclusions of more than two hundred individual studies of management personnel who reported major changes in their feelings about their work. From this evidence, the authors develop a practical theory of job motivation, job satisfaction and job attitude.

Current practices are not satisfactory. To improve on this condition, methods are explained—showing how to avoid an outbreak of harmful employee behaviour, how to increase employee performance, effectiveness and personal satisfaction.

Working Wives, by Viola Klein. *Institute of Personnel Management, 8s. 6d. post paid.*

WITH THE CO-OPERATION of Mass Observation Ltd., Dr. Klein has produced a striking survey of the employment of married women in Britain.

It appears that more than half the working wives—and there are over a million more today than in 1950—have part-time jobs; and their work is usually semi-skilled or unskilled. Perhaps the most significant finding is that more women would work if suitable part-time employment were available. However, little is known as yet of jobs that lend themselves to part-time organization. The survey makes available fascinating information that demands close attention.

By its very nature, it reveals the vast resources of labour and opportunities for recruitment, especially in the ranks of the wives in this country who are not disposed to motherhood.

Dynamic Management Decision Games, by J. R. Greene and Roger L. Sisson. *Chapman and Hall, 24s. post paid.*

THIS BOOK seeks to encourage the widespread use of educational games, and the seven "noncomputer business games" explained could easily be included in an executive development programme. The games cover every level of management in a business organization; and players' instructions, instructor background information as well as referee materials, are provided with each game.

The few widely publicized business games, the authors feel, have dealt exclusively with top management problems, and they usually require an electronic computer to handle the computations. These factors have tended to restrict the growth of 'gaming' and this book aims at improving this situation.

The Motor Industry, by G. Maxcy and A. Silberston. *Allen & Unwin, 26s. post paid.*

OF GREAT INTEREST to those connected with the motor industry, this study can be recommended to others with a professional concern for people in industry: the framework of analysis employed by the authors can be applied usefully to other industries.

The structure of the motor industry and the nature of competition amongst such large-scale manufacturers are two aspects highlighted in this comprehensive view of one of the most important British industries.

The Annual Charities Register and Digest. *Butterworth, 19s. post paid.*

WELFARE OFFICERS and others who may be perplexed by the demands which firms receive each year, of the vast number of deserving charities will be helped in making their annual selection of good causes by this 436-page guide to the dependent.

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Dental care could give employers half-a-million working days

by Wilfred Altman

MORE than half a million working days are lost every year through absenteeism caused by dental disease and its treatment. The statistics published in the Ministry of Health Report for 1957 put the figure as high as 527,600 days, and suggests that this represents only part of the probable total loss, "since certificates of incapacity are seldom rendered in respect of absence of less than four days. Absence of one to three days, which is by no means unusual, following difficult extractions, may well amount to another million days lost." In addition, there is absence caused by other ailments which are the result of bad teeth.

The state of the nation's dental health has long been a source of alarm in dental circles as much as in industry. Despite an expenditure of £300 million since 1948 on dental services under the National Health Scheme, the fact is that only two people out of every hundred are without tooth decay; and the incidence of dental disease is rising. It is estimated that in the 25 year age group, for example, only two women in five and one man in five pay an annual visit to the dentist. The rest only do so when pain, the penalty of neglect, forces them.

One method of improving Britain's dental health is by educating people to help themselves. The need for this led to the establishment some six years ago of the Oral Hygiene Service, by a group of people connected with industry, commerce and the dental profession. The functions of the service are broadly:

(1) To make available (to the public) information on all matters relating to oral health through every possible medium, especially newspapers, magazines, radio and television and cinema

(2) To provide, when necessary, authoritative comments on the latest trends

(3) To assist in the preparation of films, film strips and other educational material for use by dentists, teachers and other people concerned with health education.

When the Industrial Welfare Society conducted a survey into the dental care arrangements operated by seventeen firms, it found that the main ways of running such a service were:

(1) The provision of a room with equipment hired for a part or whole week to a dentist at an agreed rental, enabling the dentist to have a practice within the establishment, making arrangements for treatment through the welfare department. The firm would, in this way, avoid any bother with fees or with the National Health Service

(2) The firm could engage a dentist at an agreed salary and provide the necessary accommodation and equipment. National Health fees are collected by the firm, and any balance can either be paid to the dentist as a bonus, or invested in more equipment or returned to the National Health Service. The firm would not be allowed to profit by the service, though, in any case, a profit is an unlikely result

(3) The firm could engage a dentist on a salary basis completely outside the National Health Service. There is little to recommend this course.

To equip a small dental surgery adequately, including X-ray apparatus and a small dark room, costs between £1,000 and £1,500—this is quite apart from any plumbing, glazing of walls, supply of electricity, etc. The running costs of a dental surgery with an assistant and all necessary consumable items can cost anything up to £1,000 per year above the fees received. This is partly because the dentist does a considerable amount of preventive work which, it is understood, is not always remunerative under the present National Health scales. For instance, he would spend rather more time with instruction in dental hygiene than in giving treatment. He would also be co-operating with the firm's general sickness prevention work, including the maintenance of records and compilation of reports which the normal dentist would not need to maintain.

Among the largest firms questioned in the survey, full-time dentists were employed.

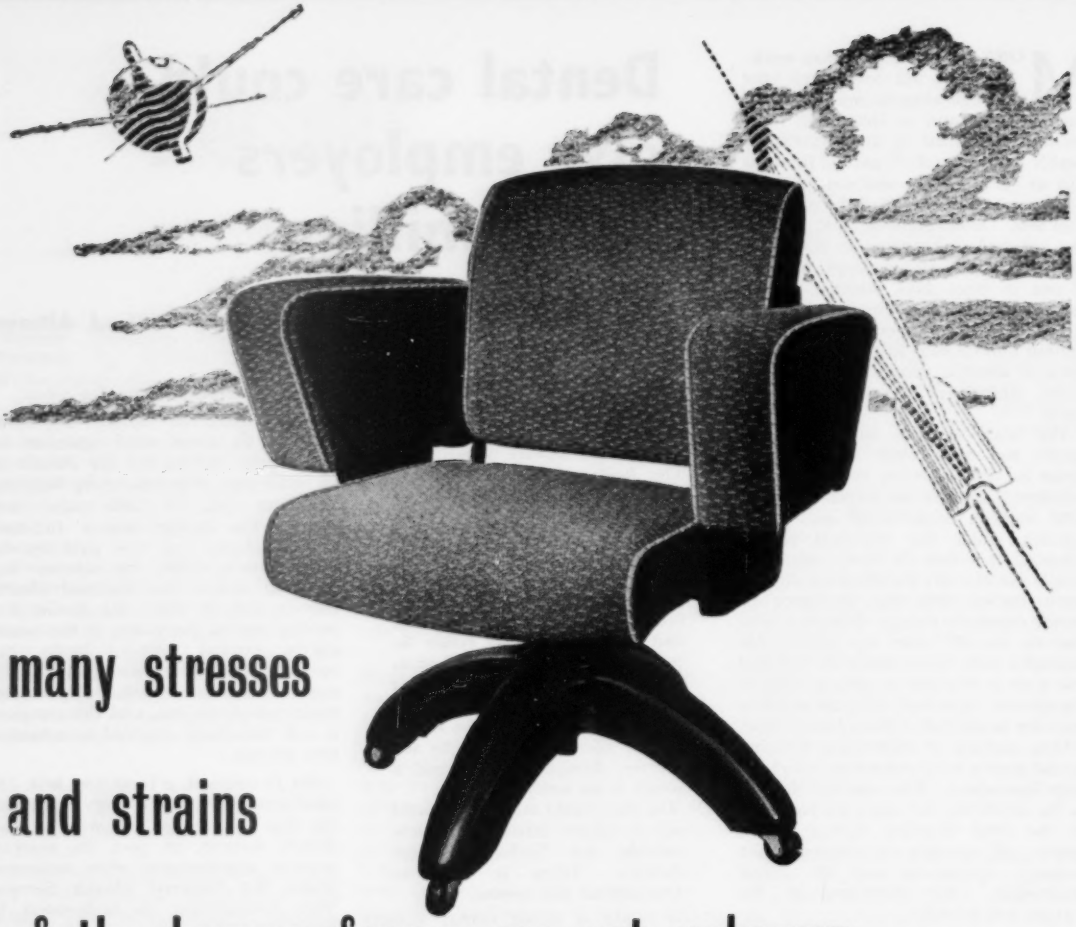
Two prominent examples were:

(a) A firm of 8,500 employees engaged on metal work operated its own dental service for the benefit of all employees, even before the National Insurance Act of 1948 came into force. The dentist was a full-time staff employee and was paid by the firm. Since 1948, the scheme has operated under the National Health Service and, in effect, the dentist is a private dentist practising in the works during normal working hours, but restricted to employees as patients. He pays a rental for the building, equipment, telephone, etc., and the company is not, therefore, required to subsidize this service.

(b) In contrast, a food firm with 250 employees does not employ a dentist, but has an arrangement with a local dental surgeon to give its workers priority appointments when necessary, under the National Health Service. This arrangement is understood to work very well.

The Ministry of Health Report (above) refers to a dental survey carried out among employees at the Shippam factory in Chichester. This firm employs a medical consultant to carry out a yearly medical examination of all staff. Additional arrangements were made, with the firm's co-operation, for a Senior Dental Officer of the Ministry of Health, and the Principal Dental Officer of the West Sussex County Council to examine the teeth of employees. The general picture was found to be satisfactory—many of the men and women had obviously received dental treatment while at school and had continued to obtain it regularly after leaving school. Enquiries showed that the local dentists had co-operated splendidly.

The care of employees' teeth can help to reduce the dreadful loss of time and earnings from which industry suffers.



many stresses and strains of the human frame are yet unknown

. . . but for a quarter of a century, Tan-Sad have been solving the problems of posture and its effect on health and efficiency in the workaday world. Tan-Sad Posture Seating is essential to office and industrial workers alike— let us tell you how posture seating can aid your production.

The answer to everyday fatigue in Industry and Commerce is

POSTURE SEATING BY Tan-Sad

The Tan-Sad Chair Co. (1931) Ltd., Lincoln House, 296/302, High Holborn, London, W.C.1
Tel : CHAncery 9231-7

"REVVI"
WALL WASHING MACHINE
Saves Time and Money

★ **Eases cleaning operations**

★ **Improves working conditions**

★ **Stimulates 'good housekeeping'**

★ **Raises employee morale**

Practically all internal painted surfaces can now be cleaned—without mess or drips—with this machine. Added to the familiar flat metal trowels, for wall and ceiling surfaces, the new Fluibrush attachment probes awkward corners, mouldings, window and door frames, radiators, pipes and the pointing of brick walls.

No more 'bucket and sponge' work. The new versatile 'Fluibrush' included as standard equipment with price unchanged.

PRICE COMPLETE £55

For further details write or phone:

REVVI Ltd., 70 BLACKSTOCK RD., LONDON, N.4 *Tel.: CANonbury 5246-7*

EQUIPMENT MARKET

A Monthly Survey for Personnel Managers

● **EFFICIENCY** ● **WELFARE** ● **OFFICE AIDS** ● **SAFETY**

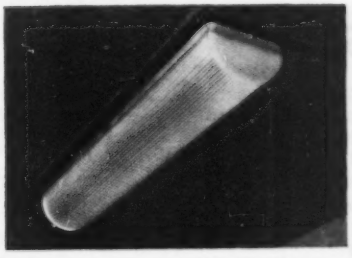
● **CLEANING** ● **HEALTH** ● **VENDING**

For more information—free of charge—on items featured in this 'Equipment Market' section, **use our Reader Service Form (facing p. 44),** *quoting the reference number of the equipment that interests you. Urgent enquiries can be made by telephoning WATerloo 3388, Ext. 216*

Lighting

BATTERY-POWERED

FLUORESCENT lighting powered only by battery supply—this is the provision of the new *C.32* low voltage unit. The fitting incorporates a single 2-ft x 20-watt tube, an opal



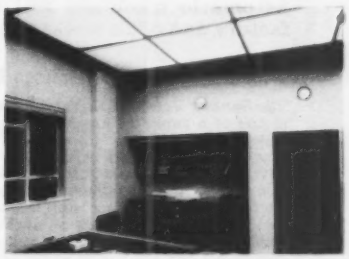
Perspex diffuser and a transistorized control unit. It is so designed that the diffuser and its chromium - plated retaining frame can be dispensed with, if not required. All metal parts are of 20 s.w.g. steel, rust-inhibited and stove-enamelled white. Current consumption of a 12-volt model is 1.8 amps; for the 24-volt model, it is 0.9 amps.

Enquiry Ref. No. L2/1

PANEL CEILINGS

BECAUSE of its high transmission, *Isora* ceiling is claimed to make maximum use of all available natural daylight and to ensure that artificial lighting is well diffused and free from glare. The makers also comment that, where large roof space can be sealed off with an Isora installation, saving in fuel costs can be as much as 40 per cent. It consists of a light but strong galvanized mild steel framework that is competely demountable at any time. The translucent panels each consist of a light, mild-steel frame over which is stretched a thin, non-sag P.V.C. plastic. The panels can be supplied in a variety of attractive colours and patterns without extra charge.

The average cost for completely installing an *Isora* ceiling is 6s. 6d. a sq. ft, although this will naturally vary according to the nature and extent of the area. Normal delivery is approximately three weeks from acceptance of



the quotation, and a guide to installation time is about 400 sq.ft a day on a straight run, once work has begun. No cumbersome supports are required, since the installation is so light, and the ceiling can be accommodated in factory or office. The illustration shows the conversion of a factory area into an office.

Enquiry Ref. No. L2/2

(Continued on page 39)

HELP YOUR STAFF TO HELP THEMSELVES

Looking after staff welfare plays a big part in modern management. This means that canteen and meal-break facilities are very much your concern. Whether your firm maintains a full canteen service or just provides staff recreation rooms, the installation of Sankey Vendo automatic machines will add to the comfort and convenience of factory and office working conditions.

A complete Canteen or Canteen Aids

The Sankey Vendo Milk Vending Machine is one of a range of automatic machines which will dispense a selection of hot beverages, ice cold-drinks in cartons, cups and bottles, ice-cream and chilled foods etc. Install one now and discover for yourself its advantages. Quick automatic, self-service — a special saving on night shifts, when even a skeleton canteen staff is costly. A 7 day week of 24 working hours a day without supervision. Time saving for quick drinks on the job. When its companion machines become available, you can build up a whole self-service canteen.

The Sankey Vendo Milk or Soft Drink Vending Machine is Refrigerated

Fully loaded, it holds 210 ½ pints of ice cold milk, plain or flavoured, and orange drink. It is coin operated, dispensing cartons automatically. Loading and servicing are quickly and simply done; overhead costs are remarkably low.

Height: 77½
Width: 32½"
Depth: 18"

Vendo

MANUFACTURED UNDER LICENCE BY **Sankey** OF WELLINGTON

A member of the Automatic Vending Machine Association.

Full details from:

Joseph Sankey & Sons Ltd., Vendo Division, Hadley Castle Works, Wellington, Shropshire. Tel: Wellington 4321. Telegrams: Sankey, Wellington.

For further details, complete enquiry coupon facing page 44

Handling

FOLDING TRUCK

IT carries like a brief-case: this is the description of a new folding sack truck. The application seen by the makers is for those small deliveries in factories and workshops that cannot be tackled quite so easily by the larger, mechanical means. This truck weighs approximately 12 lb and is made from ¾-in. dia. tube, fitted with solid rubber, tyred wheels on plain bearings with a ½-in. solid steel bar axle. In the open position, it is only 3 ft 2 in. high, by 1 ft 3 in. wide—the tubular steel extension is 6 in., and its carrying capacity is 1½ cwt.

To dismantle the truck, one slides the two bolts, half-way up the shafts, fold in half, and fold back the shoe.

Enquiry Ref. No. H2/1

SAFE LIFTING

THIS new, hand-operated elevator has been designed to lift or lower light loads rapidly yet safely. With a maximum load of 350 lb, it is self-sustaining at all heights without the necessity of brake, ratchet or pawl mechanism. Whenever the operator releases the handle, the load automatically remains stationary. The standard platform size is 21-in. long and 22-in. wide. The model illustrated is fitted with two 8-in. dia. wheels and is capable of lifting to a height of 7 ft. Another version, suitable for use where floor surfaces are even, has two 4-in. front wheels and two rear wheels on swivel castors. All elevators can be made to lift to any height between 4-10 ft.

Enquiry Ref. No. H2/2

Office Aids

SIMPLE FORM-FILLER

ANY chosen part of typing paper, invoice form, etc., can be brought immediately into the correct position on the platen at the press of a switch. This aid to typists is the basic purpose of the *Alacra Flexomatic* automatic line-finder. Its use has already increased one firm's paper output by 45 per cent. The typewriter is first fitted with a pinwheel platen (i.e. a platen with toothed wheels which engage in holes punched at the sides of continuous stationery). This has three functions: it ensures correct alignment of carbons; keeps horizontal alignment correct; and ensures that line-spacing is uniform.

The *Flexomatic* consists of a small, box-like fitment attached to the left-hand side of the typewriter carriage. This contains a plastic belt which constitutes the line-finder spacing 'programme', and is set to individual requirements. Belts are changed by the typist who can be supplied with one 'programme' for each type of form she deals with.

Operation is simple: after typing each line, the operator presses the 'Line Find' button. This causes the stationery to move automatically into position for the next line—unused portions of the form being passed over.

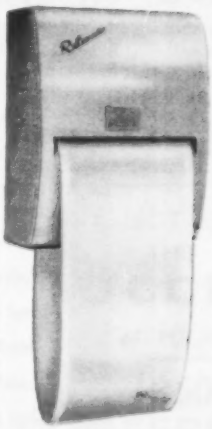
Enquiry Ref. No. O2/1

DELETES EFFECTIVELY

WITH the relaxation of dollar restrictions, the Auto Erase has now become available to British offices. Powered by two standard torch batteries, it will remove pencil, ink or typing easily and cleanly, say the makers. Deriving its effectiveness from speed rather than pressure, there is said to be no need to protect carbon copies, and even a single character can be

(Continued on page 41)

180
LOOSE TOWELS?
or
ONE
Rolomatic
TOWEL CABINET



Who wouldn't prefer a gleaming, white cabinet releasing 180 measured lengths of towelling, fresh and clean for every user?

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PLASTOCHROME
Palm coated,
knitted wrist.

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A MAIN DISTRIBUTOR OF NORTH P.V.C. GLOVES & CLOTHING

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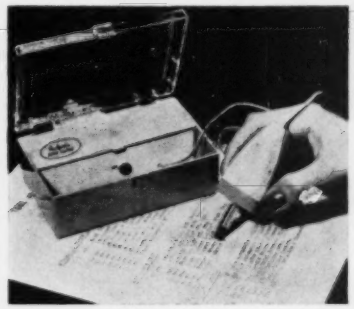


deleted without the use of a shield. When not in operation, the eraser is packed into its case which also conceals the batteries. Price complete: 50s.

Enquiry Ref. No. O2/2

UNIT FURNITURE

A WRITING table with drawers as separate components is the latest addition to the *CC* range of office furniture. The drawers are supported independently with special fitments that are screwed to the inside front rail of the table so as to give an elevated drawer running below the front rail section. The table has detachable legs, which makes the whole unit capable of dismantling—thus overcoming storage problems.

With a standard depth of 2 ft 6in., there are three widths: 4 ft, 4 ft 6in., and 5 ft. Prices range from £9 to £11 10s., with drawers at £1 17s. 6d. each.

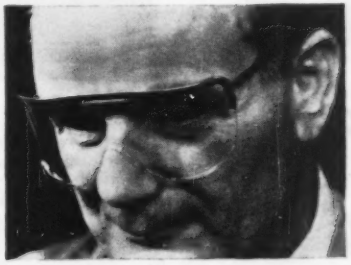
Enquiry Ref. No. O2/3

Safety

FLEXIBLE FITTINGS

MAXIMUM eye protection is combined with light weight in the new *Cromospec*, say the makers. The name is derived from the goggles' construction: chromium-plated frame which should be free from rust and other corrosive elements. To prevent misting while allowing for full ventilation, the spectacles are equipped with a plastic sweatband.

Interchangeable lenses are manufactured from high quality, shatterproof acetate, and are replaced by a simple 'snap' action. For maximum application, the *Cromospec* is fitted with a new adjustable spring hinge which allows a snug fit on all faces. For the same



reason, the plastic-covered side-arms can also be adjusted to suit all facial contours. The price of the *Cromospec* is 11s. 6d., and replacement lenses cost 2s. 11d. each. Green anti-glare lenses are also obtainable.

Enquiry Ref. No. S2/1

Welfare

TIDY CLOAKROOM

THE *Multilok* cloakroom installation consists of vertical steel units providing six, ten or twelve compartments, each of which can be locked. Suitable for small personal possessions, the unit stands alongside combined hat and shoe racks and coat-hanger rails. The hangers, attached to the rails by means of knobs which fit in to a specially designed slot, always remain equally spaced—thus ensuring that wet clothes are given ample opportunity to dry. As a point of security, the

hangers cannot be removed and are unsuitable for ordinary domestic use, unless fitted with the rail.

The units are stove-enamelled in a wide range of colours. They are free-fitting and interchangeable, thus allowing for the quick and easy re-arrangement of the cloakroom when necessary.

Enquiry Ref. No. W2/1

HARMLESS CLEANSER

FRUIT and vegetable stains are often removed from the hands by means of abrasives or strong bleaches, although this process frequently leads to skin troubles. A new cream has been introduced whose function is to make this

(Continued on page 43)

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THE
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of YOUR
1960 CONFERENCE
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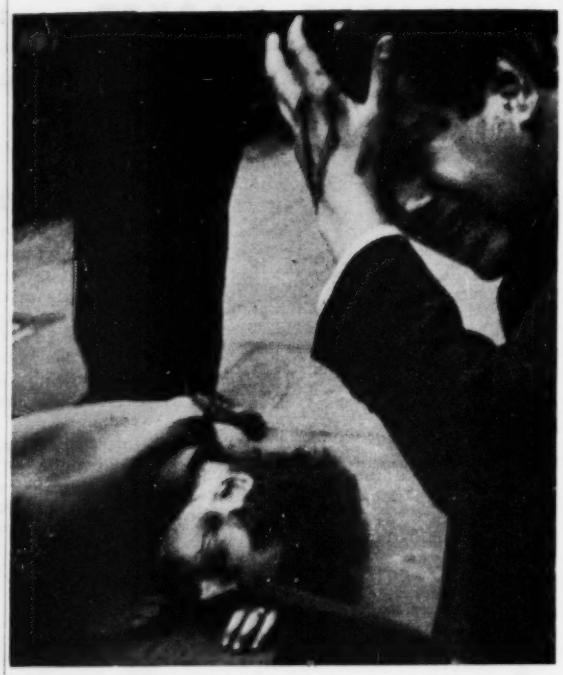

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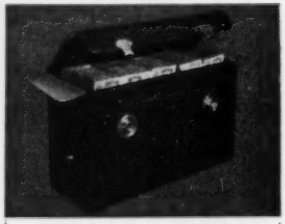


Police-recommended Security Alarm Case
For free illustrated brochure, simply send in your letterhead marked 'alarm case'.

For further details, complete enquiry coupon facing page 44

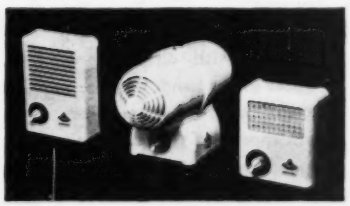
cleaning operation simpler, quicker and less harmful to the user. A small amount of the cream is rubbed thoroughly over the stained area of the skin, and wiped off with a clean cloth (it can also be rinsed off). For stubborn stains, it may be advisable to use a second application. The cream is obtainable from the makers at the tax paid prices: 2-oz jar, 2s. 11d.; 16-oz tin—6s. 6d., and 7-lb tin—31s. 11d.

Enquiry Ref. No. W2/2

Ventilation

EXTRACTS STALE AIR

GREATER alertness, increased efficiency and a general feeling of well-being: these three achievements are all claimed for the *Airco Ozonator*. Recently introduced from Switzerland for the first time, the ventilation system destroys unpleasant smells, replacing



stale air by active oxygen. The equipment has been tested by a leading London hospital who have approved it and provided a testimonial of its efficiency and effectiveness.

As the illustration shows, there are three models, all of which are available in a cream plastic finish for wall mounting or free standing.

Airco Super. This has a single discharge element and, under average conditions, is suitable for rooms up to 3,500 cu. ft. Measuring 7 in. by 6 in. by 2¼ in., it has a current-consumption of 3-5 watts.

Airco Ultra. For rooms up to 7,000 cu. ft, it contains two discharge elements and consumes between 3-5 watts.

Airco Record. A single discharge element and built-in fan make this model suitable for larger rooms. Its current consumption is between 12-15 watts.

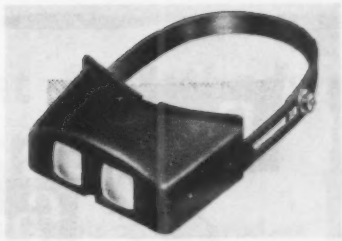
These three units cost £13, £14 10s., and £26 respectively.

Enquiry Ref. No. V2/1

Efficiency

MAGNIFYING HEADGEAR

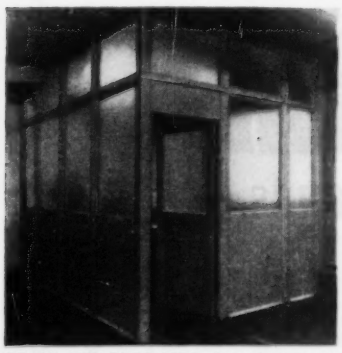
THIS precision magnifier enables the wearer to keep both hands free for close work and for the examination of minute detail. Its applications are self-evident, but specific features must be underlined. In the first instance, the lenses are accurately ground with the requisite prismatic effect to prevent eyestrain—even when worn continuously. Secondly, the frame construction is of a strong, lightweight plastic material which again reduces strain—it can also be worn by spectacle-wearers who do not have to remove their own glasses. In cases where there is excessive glare, the headband magnifier combats this by the fact that the hood extends over the top and around the side of the eyes—only the bottom being open for unrestricted downward vision. With a focal distance of approximately 6 in., and a 2½ × magnification, the appliance costs 36s.



Enquiry Ref. No. E2/1

It is hoped that firms with new products for better and safer working in industry will continue to send details to the Editor. In this way we can maintain the news value of our comprehensive Equipment Market—and continue to assist the great number of our readers who are using this free Enquiry Service.

THE NEW ADDRESS of The Simplamatic Machine Co. Ltd. is 42 Old Bond Street, London, W.1. Phone: HYDe Park 5461.



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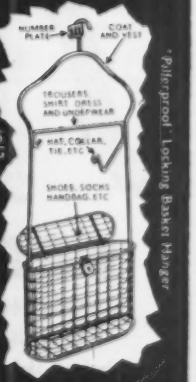

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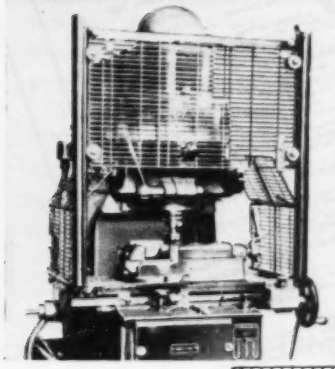

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Illustration shows a Guard fitted to a Vertical Milling Machine and so arranged that until the Guard is completely closed, the machine cannot be set in motion. Alternatively, any attempt to open the Guard immediately stops the machine.

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Siebe, Gorman, who make safety equipment for the British Admiralty, supply apparatus for hazardous jobs of every kind including deep-sea diving, all rescue work, fire fighting and aviation. In industry and the public services of many countries, Siebe, Gorman equipment is protecting people's lives and health.

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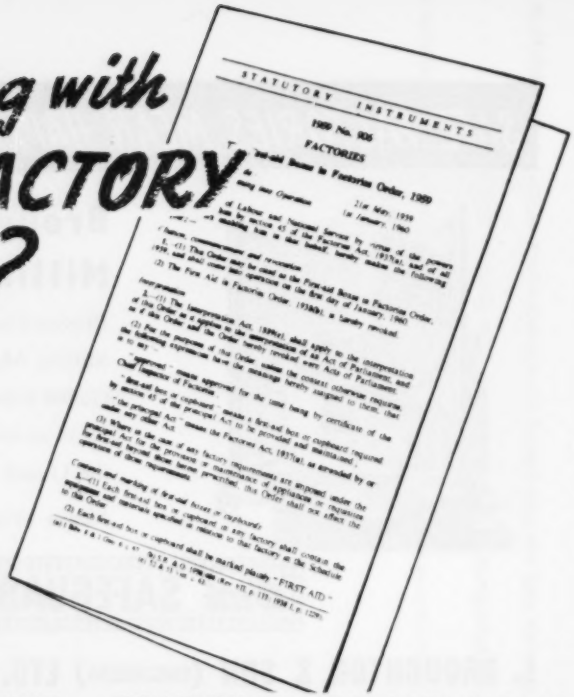
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1959 No. 956

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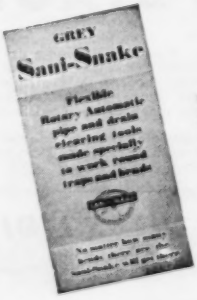

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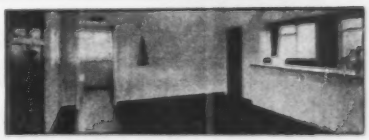

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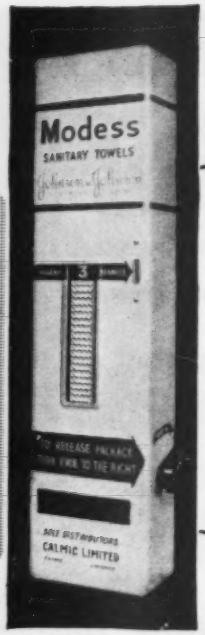

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